

Volume 17

SEP 14 1943

Number 3

AGRICULTURAL HISTORY

July 1943

- Leonardo da Vinci: The First Soil Conservation Geologist
Lois Olson and Helen L. Eddy 129
- My Impressions of Arthur Young *G. E. Fussell* 135
- The Early Agricultural Fairs of Missouri
George F. Lemmer 145
- The Historiographic Setting of Turner's Frontier Essay:
Comments on the Occasion of Its Fiftieth Anniversary
Fulmer Mood 153
- Colonia Tovar, Venezuela *Wayne D. Rasmussen* 156
- The Farmers' Museum: The Museum of the New York
State Historical Association at Cooperstown
Clifford Lord 167
- Pehr Kalm's Observations on the Natural History and
Climate of Pennsylvania: Excerpts from His Letter of
October 14, 1748 *Esther Louise Larsen* 172
- News Notes and Comments 175

Published Quarterly
by

THE AGRICULTURAL HISTORY SOCIETY

AGRICULTURAL HISTORY

Published Quarterly by the Agricultural History Society

Editorial Board

LEWIS E. ATHERTON, University of Missouri
KATHLEEN BRUCE, Richmond, Virginia
HARRY J. CARMAN, Columbia University
ROBERT G. DUNBAR, Colorado State College of Agriculture
V. C. FOWKE, University of Saskatchewan
G. E. FUSSELL, Great Britain Ministry of Agriculture and Fisheries
HERBERT A. KELLAR, McCormick Historical Association, Chicago
FRED LONDON, University of Western Ontario
RODNEY C. LOEHR, University of Minnesota
HERBERT A. SMITH, United States Department of Agriculture
O. C. STINE, United States Department of Agriculture
NANNIE M. TILLEY, Duke University
LAZAR VOLIN, United States Department of Agriculture

Editor

EVERETT E. EDWARDS, United States Department of Agriculture.

Agricultural History is designed as a medium for the publication of research and documents pertaining to the history of agriculture in all its phases and as a clearing house for information of interest and value to workers in the field. Materials on the history of agriculture in all countries are included, and also materials on institutions, organizations, and sciences which have been factors in agricultural development. The Agricultural History Society assumes no responsibility for statements, whether of fact or of opinion, made by contributors.

Agricultural History is sent to members of the Agricultural History Society. Student membership, \$1.50 for bona fide students 18-25 years old; annual, \$3.00; contributing, \$10.00; life, for a sum in dollars equal to 100 less age of applicant at last birthday; joint membership with the Economic History Association, \$5.00, the member receiving the semi-annual *Journal of Economic History* as well as *Agricultural History*.

Correspondence concerning contributions, books for review, and back numbers may be sent to the editor, Everett E. Edwards, Room 3901, South Building, 13th and C Streets, S.W., Washington, D. C.; correspondence concerning membership dues and business matters to the secretary-treasurer, Arthur G. Peterson, at the same address.

Entered as second-class matter, October 12, 1928, at the post office at Baltimore, Maryland, under the Act of March 3, 1879.

LEONARDO DA VINCI: THE FIRST SOIL CONSERVATION GEOLOGIST

LOIS OLSON AND HELEN L. EDDY

*Soil Conservation Service
United States Department of Agriculture*

For over four hundred years the world has paid tribute to Leonardo da Vinci (A.D. 1452-1519), the artist.¹ Few have recognized him as the first of the great soil conservation geologists and engineers. In the field of art, Leonardo inherited and perfected techniques of his predecessors. As a soil conservationist he was a pioneer who freed geology from the dogma of the Middle Ages, recognized its relation to hydraulic engineering, and applied both to the practical problems of creating and reclaiming farm lands.

Although Leonardo had no experience in farming, he lived in an age when agriculture had great difficulty keeping pace with the growth of towns and cities. When he was sixteen, his father moved from the little town of Vinci to Florence, and thereafter most of his life was spent in the prosperous city-states of Florence and Milan. Neither produced enough food within its own territory to support its people. Consequently, the need was always present for conserving the soil and increasing the amount of land that could be cultivated. Leonardo approached this problem not as a farmer but as a geologist and engineer.

Leonardo's interest in geology began when he was a small boy living at Vinci. One day he wandered farther than usual into the mountains and in a cave far up on Monte Albano found shells and bones of fishes embedded in the rock walls. His elders told him that the shells had been carried into the mountains by the Flood of Noah, but even as a child Leonardo had difficulty in accepting this explanation.

As he grew older, he disagreed more violently with his contemporaries who tried to adapt their scientific theories to the religious concepts of the time.² Further examination of the fossils on Monte Albano and in other mountainous parts of Italy proved that the animals had lived where they were found and had not merely been deposited there by the rising waters of the Flood. The Flood

¹ This article is one of a series by Lois Olson and Helen L. Eddy on Cato, Vergil, Columella, Ibn-al-Awam, Pietro de Crescenzi, Leonardo da Vinci, and the Paulini brothers as pioneer soil conservationists of the western Mediterranean world. For the articles of the series already published, see: "From the Archives of Old Venice [Guiseppe and Girolamo Paulini's plan of erosion control and river regulation for Venice]," U. S. Department of Agriculture, *Soil Conservation*, 6:265-268 (April 1941); "Ibn-al-Awam, a Soil Scientist of Moorish Spain," *Geographical Review*, 33:100-109 (January 1943); and "Columella and the Beginning of Soil Science," *Agricultural History*, 17:65-72 (April 1943).

² Leonardo da Vinci, *The Literary Works of Leonardo da Vinci* . . . , second edition enlarged and revised by Jean Paul Richter and Irma A. Richter, 2:168-171 (London, New York [etc.], 1939); and *The Notebooks of Leonardo da Vinci*, translated and edited by Edward MacCurdy, 316, 331 (New York, 1939).

traditionally lasted forty days and forty nights. In so short a time, Leonardo argued, cockles could not possibly have traveled to such heights from sea level. He also doubted that the Flood was universal. If it had covered the whole world, with the exception of one mountain peak, all parts of its surface would have been equidistant from the center of gravity. How then could the water have drained off the land?

To explain this paradox, Leonardo found it necessary to discard all of the current geological concepts and interpret anew the physiographic processes occurring in nature. From his observations he built up independently a theory of physiography that is very similar to that expounded by James Hutton and John Playfair about the beginning of the nineteenth century. At that time, the theories were considered radical. At the beginning of the sixteenth century, they were not only revolutionary but also heretical.

Leonardo could explain the presence of shells at high altitudes only by assuming that the mountain areas had at one time been covered by the sea. The reversal of the relative positions of land and water he attributed to the force of gravity, but made no detailed explanation of his theory. He did, however, state that the sediment deposited in the sea gradually increased in height, was compressed by its own weight and the action of waves, became consolidated, and was eventually converted into solid rock. The rock might be sandstone, limestone, or conglomerate, depending upon the conditions under which it was deposited. Where slight alterations occurred in the relative positions of the land and water, layers of rocks of different types might be formed one on top of another.³

After rock was elevated, it again became a part of the land mass and was again exposed to the erosive action of running water. "Water," said Leonardo, "is nature's carter. . . ."⁴ Unless all parts of the surface of a body of water are equidistant from the center of gravity, the water must necessarily move from higher to lower altitudes. In moving "The water wears away the mountains and fills up the valleys, and if it had the power it would reduce the earth to a perfect sphere."⁵ High mountains, even though remote from the sea, drive it from its place because a river raises the bed of the sea "with the soil that it carries there."⁶ Running water had carved out the valleys, leaving the mountains as remnants of an earlier, continuous bed of rock.

Leonardo was less accurate in describing the source of water in high places, contending that the water circulated up and down through the rock like blood in the human body. However, he did recognize the role of the hydrologic cycle, stating that "the sea has gone back many times to the sea." Water that had been evaporated into the atmosphere was free of all impurities—as if it had been distilled. The vapor was then transported from place to place by the wind

³ *Literary Works of Leonardo da Vinci*, 2:164-166; *Notebooks of Leonardo da Vinci*, 330, 347.

⁴ Leonardo da Vinci, *Les Manuscrits de Léonard de Vinci . . .*, with French translation by Charles Ravaisson-Mollien, K 2 r (Paris, 1888); and *Notebooks of Leonardo da Vinci*, 727.

⁵ *Ibid.*, 317.

⁶ *Ibid.*, 734.

until it entered a cold area where it was "pressed together" and fell as rain or snow.⁷

The rate at which a river eroded its valley, according to Leonardo, varied with its speed, volume, the slope of its bed, the character of the rock over which it flowed, and the amount of silt that it carried. A stream flowing straight down a steep slope possessed high erosive power. Down cutting deepened its channel, and side cutting widened the valley. If the water fell vertically, the force was sufficient to deepen the river bed at the base of the fall and to undercut the cliff. A rapid stream with churning water undercut its banks and widened its valley.

As bare rock was exposed it began to crumble and was "continually changed into soil subdued alike by heat and frost."⁸ Soil formation varied with the character of the bedrock. Similarly, although speed and volume remained constant, the rate at which a river eroded its valley depended upon whether it flowed across "beds of different natures, namely upon stone or earth, or tufa or clay, sand or mud. . . ."⁹ Under any circumstances, said Leonardo, "the largest rivers flow through the largest valleys which have been made by them"¹⁰ Two centuries later, when John Ray stated the same principle, it was considered epoch-making.¹¹

As the current became slower a river began to deposit instead of erode. Sediment from the higher reaches of a valley was deposited lower down, the heaviest particles being deposited first. By raising the river bed in its lower reaches, sedimentation reduced the gradient and retarded the stream flow. In describing the theory of selective deposition, Leonardo said:

When a river flows out from among mountains it deposits a great quantity of large stones in its gravelly bed, and these stones still retain some part of their angles and sides; and as it proceeds in its course it carries with it the lesser stones with angles more worn away, and so the large stones become smaller; and farther on it deposits first coarse and then fine gravel, and after this big and then small shingle, and after this follows sand at first coarse and then more fine; and thus continuing the water turbid with shingle and sand reaches the sea. . . . [fine sediment] being . . . almost of the nature of water in time of calm weather it drops down and settles at the bottom of the sea¹²

Slope, he noted, was not the only factor that affected the current of a river. Even when a river flowed across a gentle and uniform slope, a slight obstruction was sufficient to divert its flow and cause a meander. This was one reason why the lower Arno River continually shifted its course. On the outer side of the meander the water had to travel farther and faster than on the inner side. Con-

⁷ *Ibid.*, 734-735.

⁸ *Ibid.*, 743.

⁹ *Les Manuscrits de Léonard de Vinci*, I 77 [29] r-v (Paris, 1889); *Notebooks of Leonardo da Vinci*, 716.

¹⁰ *Ibid.*, 737.

¹¹ John Ray, *Miscellaneous Discourses Concerning the Dissolution and Changes of the World*. . . (London, 1692).

¹² *Notebooks of Leonardo da Vinci*, 330.

sequently, the stream scoured its bank on the outside and deposited sediment on the inside of a bend.

In cross section, also, the current of a river varied, being faster at the center than on the sides. Normally, the surface water flowed more rapidly than that at the bottom of the river, but Leonardo found that this was reversed if the stream flowed against a strong wind. The variations in current resulted in irregularities in the scouring power both along the banks and in the bed of the river.

When the water could not be disgorged through the river as rapidly as it entered the channel, flood waters spread out over the land, removing soil where the flow was rapid, and depositing silt wherever its speed was checked. In the neighborhood of Florence, Leonardo noticed that many productive areas had been converted into waste swamplands as a result of floods and sedimentation. Among these was the Val di Chiana, which had been known to the Romans as the "granary of Etruria."

Water in marshes moved more slowly than that in streams, because it entered a marsh through a narrow channel and then spread out thinly over a nearly level area. Sediment settled to the bottom, leaving the surface water practically clear. Only the upper layer of clear water flowed away at the lower edge of a swamp. If the process were not interrupted, marshes would eventually be filled by the sediment that settled there and so be converted into land suitable for farming.

Leonardo da Vinci's geological observations covered a period of fifty or more years. As he grew older, he became less interested in pure theory and more interested in the practical application of the principles he had developed. Erosion, sedimentation, and floods were all natural phenomena operating under fixed laws of nature. Despite all of man's efforts they would continue. It was desirable that they should.

Like Francis Bacon, Leonardo believed that "nature is best commanded by obeying her." If erosion and sedimentation could not be stopped, how could they be put to profitable use? Both were parts of the same process, known today as the erosion cycle. Together they had produced the most productive lands of Italy, such as the valley of the Po. On the other hand, they had changed valuable farm land into useless swamps, as in the case of the Tuscan Maremma and the Pontine Marshes. Under natural conditions the constructive and destructive processes practically balanced each other. But Leonardo noted that rivers that flowed through densely populated areas deposited more sediment than those in sparsely populated areas, because "in such places the mountains and hills are being worked upon, and the rains wash away the soil that has been turned up more easily than the hard ground which is covered with weeds."¹³

Soil washed from the fields entered the streams. If they were sluggish the sediment was carried only a short distance before it was deposited, but if they were rapid the presence of silt increased their cutting power.

His understanding of the erosion cycle suggested to Leonardo ways of increas-

¹³ *Ibid.*, 310.

ing the available amount of farm land. If marshes bordered a slow-flowing and meandering stream, straightening the channel would increase the gradient and accelerate drainage. In a modified form, this was the plan suggested by Leonardo for draining the Pontine Marshes.

Although drainage was the simplest form of swamp reclamation, it was not always practical. In some swamps there was so little movement of water that the channels were almost imperceptible. In central and northern Italy many swamps were located on small plateaus nearly surrounded by mountains or in sections of the mountain valleys. Here it was more profitable to fill in the swamp than to drain it. Leonardo recommended that dams be built at the lower edge of the swamp to reduce the movement of water still further. The silt load would then be deposited more rapidly, and the process of filling would be accelerated. The upper layer of water pouring over the dam would be practically silt free.

As sediment was deposited, the stream could gradually be confined within a definite channel, deep and broad enough for transportation. Leonardo proposed that locks be constructed near the dam sites to permit continuous navigation. This was the program he suggested for reclaiming the upper valley of the Chiana, where the water divided, flowing in part south to the Tiber and in part north to the Arno. Dams had been built in the Val di Chiana before Leonardo's time and attempts to reclaim the swamp have continued to the present. Leonardo, however, was the first to design locks, which would permit navigation without interrupting the work of reclamation.

Leonardo also recommended extending the principle of sedimentation to the building of new land. By constructing a dam, an artificial swamp could be made at any point along a river. Although this would temporarily reduce the amount of arable land in the valley, the new land created by gradual filling would far outbalance the temporary loss. This later became known as the *colmata* system, which literally translated means "filling to the brim." After the fifteenth century, it was used widely throughout Italy but was confined to land along small streams. Even today it is one of the standard methods of land building used by the *Bonifica Integrale*, a national organization established by the fascist regime in Italy wherein all phases of land reclamation are consolidated under a single authority for the purpose of raising the standard of agricultural production.

From the agricultural standpoint, the time required for filling represented a financial loss. To reduce the loss Leonardo again employed the principles of erosion. He had noted that valley lands were often surrounded by slopes too steep for either farming or grazing. On such waste land he recommended that feeder channels be dug in positions that would stimulate gullying. The material that was eroded was then to be directed into the main channel with such speed and at such an angle that the water of the tributary cut across the main current and eroded the opposite bank. If the current were sufficiently strong the cutting power of the water would be increased by the material in suspension, but all of the erosion debris would be washed away and would be available for deposition

lower down the valley. This is the earliest known recommendation for the manufacture of soil by utilizing the processes of erosion.¹⁴

Where rivers were dammed to produce artificial lakes or reservoirs, sedimentation reduced their capacity and threatened their permanence. To prevent this Leonardo constructed dams with sluices that lifted from the bottom. If they were opened periodically the pressure of the water above caused a flow rapid enough to clean away sediment that had accumulated. Leonardo reported that he had applied this principle successfully in the province of Friuli, in northern Italy, and recommended it wherever artificial reservoirs were needed for water power.

Leonardo also suggested that the debris carried by rivers in times of heavy rain could be removed by diverting the water into numerous small channels with gentle gradients. As the water was retarded in the channels, it deposited its sediment and became clear again. In this way the sediment, instead of filling the reservoirs, could be conducted into areas where it would renew the soil.

In his untiring search for an understanding of nature, Leonardo neglected no phase of the erosion cycle. His application of the principles was more limited. Recognizing his own lack of experience, Leonardo never attempted to advise farmers on methods of crop production. Instead, he directed his energies toward state projects that would increase the amount of arable land. The cities were dependent upon the land for their food. They, through scientific knowledge not available to farmers, could in part repay this obligation.

¹⁴ *Les Manuscrits de Léonard de Vinci*, F 14 r, 17 v.

MY IMPRESSIONS OF ARTHUR YOUNG

G. E. FUSSELL

*Ministry of Agriculture and Fisheries
London, England*

Arthur Young was an enthusiast, but his enthusiasm was tempered by a strong dash of realism. That was the reason why he was so anxious to collect facts and the figures which describe them. Political arithmetic was a century old when he was born, but, in spite of an intelligent use of the Bills of Mortality, such vital statistics as had been compiled were little more than intelligent guesses and often not even intelligent.

The fortunate accident that turned Young into a farmer rather than a citizen of literary parts led to the first attempt to obtain not only statistics of production but also costs of production in a particular industry. He did this by the lately recognized method, euphoniously entitled "field work," instead of by the Buddhistic method of concentration practiced by so many of his contemporaries.

Young was fortunate in his friends, particularly in his acquaintance with the Reverend Walter Harte,¹ whose sketch of the farming methods seen in the course of his Continental travels inspired one of Arthur's earliest essays, "Of the Usefulness of Acquiring a Knowledge of Foreign Practices in Husbandry."² This essay strikes the keynote of the whole of Young's activities. He thought that the best way of learning about farming was to go out into the countryside and see how it was done by the men who were doing it. A record of the different methods used in various parts of the country and of their practical results in yields, in cash, and in profit, could not but be helpful to any working farmer who would take the trouble to read about them and compare them with his own.

There had been many tourists who wrote of England before Young set out on his travels and many geographies that contained scrappy economic data, but none of these works made more than occasional references to farming and these of a kind useless to a working man although not quite so useless for other purposes.³ When he had to go on private business from Bradfield to South Wales in 1767, Young, who was then only twenty-six years old, set out to remedy this defect for the country he passed through, and the result was his volume entitled *A Six Weeks' Tour, Through the Southern Counties of England and Wales* (London, 1768).

Young's own estimate of this book is that it is one "in which, for the first time, the facts and principles of Norfolk husbandry were laid before the public,"⁴

¹ Author of *Essays on Husbandry*, 63-64 (London, 1764). For details concerning Harte, see G. E. Fussell, "A Parson on Farming, 1764: The Rev. Walter Harte and His 'Essays on Husbandry,'" *Estate Magazine*, 37:758-760 (Letchworth, England, 1937).

² *Museum Rusticum et Commerciale*, 4(8):58-65 (London, 1765).

³ See G. E. Fussell, *The Exploration of England: A Select Bibliography of Travel and Topography*, 1570-1815 (London, 1935).

⁴ *The Autobiography of Arthur Young; With Selections from His Correspondence*, edited by M. Betham-Edwards, 44 (London, 1898).

but as important as these facts were, even two years before Coke of Holkham settled in the county, the book is much more valuable than Young would have us believe. It laid before the public "the facts and principles" of the husbandry of a line of country from Bradfield to London and from London to South Wales, and the details given were quite all inclusive. They comprised the crop rotations, the implements used including drawings of some novel to Young, the cost of labor and provisions which often varied surprisingly in a few miles, the size of farms, and the number of men and horses or oxen employed on the different-sized farms. As if this were not enough to occupy all his powers of observation and industry to record, passing reference is made to local industry, such as the manufacture of Witney blankets, and useful facts and figures about it are mentioned. Even at that Young's passion for facts and figures could not allow him to rest, and what I regard as too much attention is paid to details of the size of rooms in great houses, e.g., Blenheim, visited in the course of the journey, and discussions of the details of pictures by well-known artists (old masters) which hung on their walls, but this may all have been a sop to the Cerberus of the intelligentsia of the day, whose attention Young desired to attract and divert to the problems of farming.

Young did not try to assemble the economic data he collected on this tour and draw any general conclusions from them, possibly because he realized that the area visited was narrow and the data correspondingly a poor sample. A much better sample was collected in the following year, 1768, when his Northern Tour was undertaken. On this tour Young traveled 2,500 miles from Bradfield to the northern boundary of England, across country westward, and so in a wide sweep back home, and he collected statistical data from some 250 farms of all sizes and descriptions. These data he attempted to assemble in what is perhaps the first farm survey ever undertaken by an individual in order to use them in the discussion of current farming problems.⁵ One of these was the size of farms, a problem which can hardly be said to have been solved until this day. He justly said:

I must, in the next place, enter upon a review of perhaps the most important part of the intelligence I generally received, that of the particulars of farms. . . . There has not, of late years, been any subject in political oeconomy that has been more debated, than the size of farms that is most advantageous. . . . Upon this very important subject, the publick has hitherto received no other information or satisfaction, that what is to be had from reasoning; we have had volumes of reasons, arguments, and opinions, upon this point, but scarce any facts; it is, therefore, with peculiar satisfaction, that I shall endeavour to treat the subject in a new way, by presenting facts alone.⁶

This he proceeded to do by tabulation of his figures and came to the not unreasonable conclusion, for his time as for today, that a farm of about 300 acres is prob-

⁵ For a more detailed discussion of this project, see G. E. Fussell, "A. Youngs erste 'Farmbetriebs'-Aufnahme," Reichsministerium für Ernährung und Landwirtschaft, *Berichte über Landwirtschaft* (n.f.), 19:117-123 (Berlin, 1934).

⁶ *A Six Months Tour through the North of England*, 4:341 (London, 1770).

ably the best economic unit. His exact figure is 287 acres, half arable and half grass.

The table which leads to this conclusion is provided with the heads: Soil and general rent; Acres; Grass; Arable; Rent; Draught; Cows; Fat; Young; Sheep; Servants; Maids; Boys; Labourers; Wheat; Barley; Oats; Pease; Beans; Turnips; Clover; Average Product; Farms in general (size is given in rent per acre); and Medium (rental per acre in £).⁷ Totals are provided, but the average yield is only a figure unrelated to any crop and is, therefore, anomalous. I have elsewhere assumed it to relate to the average yield of wheat per acre. Perhaps I should also explain here that the term "servants" means farm laborers who lived in the house and got part of their wages in the form of board and lodging. It does not mean domestic or household servants.

In his comments on these tables Young disclosed in no ambiguous manner the utterly scientific cast of his mind.

Candour requires me to remark that the proportions of the crops are not drawn from equal authority with the other articles. In many instances I was not informed of the actual number of acres of each grain; in which case I supply the break by the mean proportions of the courses of crops in the neighbourhood; a method that, probably, is not accurate, but which is undoubtedly more to be depended on, than any general calculations, or suppositions. . . .⁸

Young's conclusion that about 300 acres was the most productive size of farm is supported by a further table giving the produce of the different sizes of farm in categories up to 50 acres, 50 to 100, 100 to 200, 200 to 300, 300 to 400, 400 to 500, 500 to 700, 700 to 1000, and above 1000 acres.⁹ There are other calculations which strike the modern reader as something of oddities, but there is also one in quite the modern vein showing cattle per 100 acres and cattle per £100 rental on different-sized farms, as well as one to determine the density of population in a similar relation. The financial side was not neglected, the capital required for various types of farming in the large number of counties visited being discussed as well as the cost of provisions in relation to the prevailing rates of laborer's wages. As he himself admitted, with admirable ingenuousness, "This method of gaining a knowledge of the rural oeconomy of the nation, although not perfect, is far more satisfactory than general calculations, founded on circumstances extremely foreign to the subject."¹⁰

Similar material was collected for a wide range of country, and published in 1771 as the Eastern Tour, but Young did not tabulate it. Otherwise, he might have been able to emphasize the conclusions founded on the data in the Northern Tour. This is rather a pity because the optimum size of farms, for example, was a subject very close to his heart, and he had already discussed it in *The*

⁷ *Ibid.*, facing 343.

⁸ *Ibid.*, 354.

⁹ *Ibid.*, 357-367.

¹⁰ *Ibid.*, 491.

Farmer's Letters to the People of England, issued in 1767.¹¹ Here the argument was based on inquiries made on the farms in his neighborhood and is, in embryo, the same sort of thing as was done on the Northern Tour, but these early essays contained a good deal of reasoning. The *Farmer's Letters* includes "Sylvae," which consists of some very early essays that had appeared in the periodical, *Museum Rusticum et Commerciale*, and had been gathered together for publication on the advice of the Reverend Walter Harte. One of these is an attempt to compare the profit of arable and grassland, and here again, in his very nonage, is evidence of Young's passion for the precise fact disclosed by figures. However, I very much suspect that those presented here are obtained from common knowledge—yet farmers' knowledge withal—rather than actual costings of particular farms, although Young himself claimed that they were based on farms with which he was acquainted.

Even so, these early essays, some published in 1764, show that Young was already widely read and that he had not confined his reading narrowly to farming textbooks, although, of course, the main trend was in that direction. In spite of his authority, however, he did not disdain the then illiterate or semiliterate farmer, and went so far as to inscribe an essay, "The Common Farmer Vindicated," in his defense.

It was inevitable that a new method of controversy on the farming question, supported as it was by incontrovertible facts and figures, such as were not even in existence before, should arouse both admiration and intense disgust. The former showed itself in the widespread popularity of the books; the latter in acrimonious attacks both on the product and its author. Criticism and controversy were conducted in a rambunctious manner in those days, and it was, judging by contemporary writings, quite impossible to overstep the bounds of good taste. Young was, however, as well equipped as his opponents to deal in invective and slanderous assertion, so probably no harm was done to anybody and the publicity helped to sell the books.

Young's own estimate of them is worthy of record. It shows him as being possessed of no false modesty:

In these works I particularly attended to the course of the farmer's crops, the point perhaps of all others the most important, and the more so at that period, because all preceding writers had neglected it in the most unaccountable manner. . . .

It has been very justly said that I first excited the agricultural spirit which has since rendered Britain so famous; and I should observe that this is not so great a compliment as at first sight it may seem, since it was nothing more than publishing to the world the exertions of many capital cultivators and in various parts of the kingdom, and especially the local practice of common farmers who, with all their merit, were unknown beyond the limits of their immediate district, and whose operation wanted only to be known to be admired.¹²

True it is that justice is here done to the common farmer, but earlier tourists had neglected to notice him, "confining their attention absolutely to towns and

¹¹ *The Farmer's Letters to the People of England*, 90 (London, 1767).

¹² *Autobiography*, 30-31.

seats, without paying any more thought to agriculture than if that art had no existence between the towns they visited."¹³ Young certainly made up for their deficiencies and set a fashion which has been copied at intervals ever since.¹⁴

It was a fashion which Young continued to follow himself. Nearly every volume of the *Annals of Agriculture and Other Useful Arts* contains notes on short journeys into some rural district or other, and taken together these brief tours alone cover a very respectable proportion of the whole country. Before this he had spent three years in Ireland, and produced *A Tour in Ireland* (1780) and during the time the *Annals* (1783-1815) were appearing and he was making sporadic journeys to different parts of England and Wales, he found time to go to France and prepare an account of his travels there.¹⁵ It is a matter of recurrent astonishment to me that the French tour should have made so great an appeal to the literati as it has done. Augustine Birrell's essay on Arthur Young is devoted almost entirely to it,¹⁶ and even the centenary essay in the *London Times Literary Supplement* mentions little else of his widespread activities.¹⁷ Possibly in these writers' minds an atmosphere of romance surrounded a journey made at some personal risk when the French Revolution had already broken out, especially as the same horse was used for a very long tour. Having seen something of both the first World War and the blitz on London in 1940, I am doubtful whether there is ever any romance about slaughter, and the use of one horse for a long journey can be nothing new in America; indeed Tschiffely outstripped Young in this respect quite recently.¹⁸

When the Board of Agriculture was formed and began its survey of farming by counties, Young, in spite of being appointed Secretary of the Board, undertook to write surveys of six counties and these were by no means the smallest in the country. They were: Suffolk, 1794, Lincoln, 1799; Herts, 1804; Norfolk, 1804; Essex, 1807; and Oxford, 1809.

Young was never tired of doing this sort of work, and in the introduction to his *General View . . . of Lincoln* he emphasized its importance. "I cannot conclude these observations," he wrote, "without remarking the extreme importance of examining the several provinces of the kingdom repeatedly, till all the singularities of their state, and practical husbandry, are well ascertained. I by no means pretend to have exhausted Lincolnshire. . . ."¹⁹ That was not a surprising

¹³ *Ibid.*, 54.

¹⁴ Cf. J. A. Scott Watson, *Rural Britain To-Day and To-Morrow* (Edinburgh and London, 1934); and S. L. Bensusan, *Latter-Day Rural England, 1927* (London, 1928).

¹⁵ *Travels during the Years 1787, 1788, and 1789; Undertaken More Particularly with a View of Ascertaining the Cultivation, Wealth, Resources, and National Prosperity of the Kingdom of France* (Bury St. Edmund's, 1792).

¹⁶ Augustine Birrell, *In the Name of the Bodleian and Other Essays*, 183-194 (New York, 1905).

¹⁷ "Philosopher at Home and Abroad: Arthur Young, 1741-1820," *London Times Literary Supplement*, Sept. 13, 1941, p. 458.

¹⁸ The reference is to A. F. Tschiffely. See his book, *Tschiffely's Ride: Ten Thousand Miles in the Saddle from Southern Cross to Pole Star* (New York, 1933).—Editor.

¹⁹ *General View of the Agriculture of the County of Lincoln*, iii (London, 1799).

admission coming from a man who confessed that he had been commissioned to stay in the county seven weeks, but had extended his visit to twelve. This report was most virulently attacked, not only by T. Stone, who had hoped to do the work himself and been superseded, but in the *Farmers' Magazine* of 1801 which commented:

Mr. Arthur Young, who amused and instructed us in our younger days, by his rural writings, is the author of this work: Indeed, whether the title-page had afforded us this information or not, the work itself contains intrinsic evidence of the source from whence it proceeded. We observe the same desultory way of writing, the like chaos of materials, and a similar quantity of political arithmetic, as characterize this gentleman's other performances. Considering the number of years he has been employed in such investigations, the public might have sanguinely expected a perfect view of the Lincolnshire husbandry, especially as the author had a full command of official information.²⁰

Much of this criticism was undoubtedly just, and Young defended himself against it in the introduction to his *General View . . . of Essex* (1807). He explained that he had made a journey of 1,000 miles to examine a county with a million acres—no bad achievement in itself for a man of sixty-six. His claim was that "In drawing up this General View of it, I have followed the same rule by which I acted upon former occasions—to let the reader have the authority, not only of Essex farmers in general, but of the individuals in particular. I take it for granted that he does not want my ideas, or proposals. He has accordingly only Essex authority; I offer myself rarely to his notice, and never without warning him."²¹ This method inevitably caused repetition in the matter presented, and Young thought that the reports should be useful tables rather than agreeable books. By the greater mass of detail they presented so would they simplify the task of the writers of the proposed condensed survey of the country as a whole. I don't know that this conclusion is incontrovertible, and the task of writing the *Code of Agriculture*, which appeared in 1817, can have been hardly less tedious than that self-imposed one of William Marshall's review of the Reports to the Board of Agriculture.²²

I have dealt with Young's work as an investigator of local farming methods in England and Wales at some length because it is his descriptive writing that is of most value to the historian, and because his desire to record the exact truth of what he had seen is so evident in his own remarks. Although, like everyone else, he had his prejudices, he was prepared to accept evidence against them, and to

²⁰ *Farmer's Magazine*, 2:65-66 (Edinburgh, 1801); quoted in G. D. Amery, "The Writings of Arthur Young," Royal Agricultural Society of England, *Journal*, 85:183-184 (London, 1924).

²¹ *General View of the Agriculture of the County of Essex*, 1:vii-viii (London, 1807).

²² Sir John Sinclair, *The Code of Agriculture; Including Observations on Gardens, Orchards, Woods, and Plantations* (London, 1817); and *A Review of the Reports to the Board of Agriculture; From the Northern Department of England*. . . (York, 1808); *A Review of the Reports to the Board of Agriculture; From the Western Department of England*. . . (York, 1810); and *A Review (and Complete Abstract) of the Reports to the Board of Agriculture; From the Midland Department of England*. . . (York, 1815).

modify his ideas as the years went by and his knowledge and experience grew. There is a fashion today to compare his survey work with the *Rural Economy* series produced by William Marshall to its disadvantage. Some weight may be attached to a contemporary criticism that it is not possible to survey farming by looking at the fields while passing along the road in the comfort of a chaise traveling rapidly at less than 10 miles an hour, but Young did much more than this. He collected information from local people and while this method is not infallible because wide experience is necessary as a background and some local people are inclined, even today, to tell tall stories to test the gullibility of their interlocutors, yet it was then an innovation. Marshall's information may have been more deep-seated because, at any rate so far as his early work is concerned, he lived for some time in the places described, but he was not the originator of this type of work. Be that as it may, he was undoubtedly jealous of Young's appointment as Secretary to the Board of Agriculture, a post to which he thought that he himself had some claim.

A wise crack, or *bon mot* if you prefer, which holds that the only time when one is qualified to do a piece of research is when one has completed it, might have led a good many of us to erase early work had that proved possible. Young actually tried it. *A Course of Experimental Agriculture* was published in two large quarto volumes in 1770. "Its author in after years regretted its publication and spent much time and money in buying up and destroying such copies as came upon the market."²³ This book was partly the result of Young's unsuccessful farming at Samford Hall, Essex, which he took in 1767 in order to separate his wife from her mother-in-law.²⁴ The two volumes of the *Course* have been estimated to contain nearly four million words.²⁵ At the time Young said: "The principal part of the last seven years I have lived in such retirement, and given so unlimited an attention to matters of husbandry, that my constant employment, as well as amusement, when out on my fields, has been the registering experiments; . . . and my papers multiplied until they grew into volumes."²⁶ Suspicious as one may be of the accuracy of some 3,000 experiments carried out in a few years, Young's mind was sufficiently critical to point out that certain types of experiment that had much to commend them omitted the factor which to the practical farmer was the most essential of all, the cash profit. This was the one yardstick by which to decide whether or not to adopt the experimental method on a farm worked "for to get a living." He recognized the value of knowing the exact details of how the work was done, but believed the cash profit to be unequivocal, while the yield alone meant nothing. Any increase might in fact have been secured at too great a cost. He pointed out that "It is impos-

²³ Amery, "The Writings of Arthur Young," 180.

²⁴ Albert Pell, "Arthur Young," Royal Agricultural Society of England, *Journal* (ser. 3), 4:5 (London, 1893).

²⁵ Amelia Defries, *Sheep and Turnips; Being the Life and Times of Arthur Young, F.R.S.*, 195 (London, 1938).

²⁶ Arthur Young, *Rural Oeconomy: or, Essays on the Practical Parts of Husbandry*, 5-6 (London, 1770).

sible for single experiments, or from a great number, in different lands, separately considered, to deduce a satisfactory proof of the superiority of any method," and he disdained experiments for one or two years and calculations for many years based upon them.²⁷ All this is very just, but I cannot help having a sneaking feeling that many of the costs given in Young's own record of experiments were like those in other types of farming treatise, to which he took such great exception. They were in fact estimates rather than actual costings. He probably knew very well how much it cost to plow an acre both at Bradfield and at Samford, and did not hesitate to use this cost as a guide to the expense of plowing for the purpose of an experiment. Probably his other costings were of the same type although, of course, there is no actual proof that it is so. He did, however, try to suppress the book, and that may have been partly because he was wholly satisfied neither with the way the experiments had been carried out in the field nor with the results he had recorded.

The mere bulk of the *Course of Experimental Agriculture* is a prelude of the indefatigable industry which produced the two hundred and fifty volumes about or bearing on farming problems in a longish life. Such an output could not but be unequal, and aroused admiration and contempt, both in his lifetime and later, although the later criticisms were more kindly than those published contemporarily. Ernle wrote enthusiastically:

His careless ease of style, his racy forcible English, his gift of happy phrases, his quick observation, his wealth of miscellaneous detail, make him the first of English agricultural writers. Apart from the value of the facts which they contain, his tours, with their fresh word-pictures, their gossip, their personal incidents, and even their irrelevancies, have the charm of private diaries.²⁸

Ernle added that "Young was a man of strong prejudices. He was also wanting in a power of generalization. But he worked untiringly for what he believed to be the progress of good farming."²⁹

Thorold Rogers went even farther in his strictures. For him Young "is no economist at all in the most shadowy sense of the word, for he has no real conception of the harmony of interests, the exposition of which is the true function of the economist. His entire sympathy is with agricultural production. Everything must lend itself to this result."³⁰

Russell M. Garnier, whose *History of English Landed Interest* I admire, perhaps got closer to the crux of the question when he wrote "He [Young] was not so much instrumental in conveying knowledge to the common farmer, as in becoming the vehicle by which the latter's want of knowledge was made known to the

²⁷ Arthur Young, *A Course of Experimental Agriculture*, 1:xiii (Dublin, 1771). See also G. E. Fussell, "The Technique of Early Field Experiments," Royal Agricultural Society of England, *Journal*, 96:S2 (London, 1935).

²⁸ Ernle, *English Farming Past and Present*, 195 (ed. 5, London, 1936).

²⁹ *Ibid.*, 197.

³⁰ James E. Thorold Rogers, *Six Centuries of Work and Wages; The History of English Labour*, 475 (New York, 1906).

experts."³¹ It might be added that he told the experts what the common farmer already knew. Garnier added: "No history of English land would be complete without a careful analysis of his character, life and writings, and no chronicler of the agriculture practised a hundred years ago could ignore a man whose name stands out as a landmark between the communal husbandry of the middle ages [*sic*] and the scientific processes of the present day [1890]. He forms one of a trio with Cobbett and Caird,"³² but he was the first and foremost of this trio. Young's "mind was not so expansive as to fit him for economical reasoning. . . . We hardly think, however, that Rogers has read Young's character aright. . . . Nor, again, does Mr. Prothero [Ernle] quite hit off his particular idiosyncracies."³³ A little later he added a comment which greatly pleases me: "it is probably correct to say that the secret of Young's success in literature was an imperfect literary education. . . . But a college education would have just muzzled that audacity of thought and vigour of expression which lifted his powers of composition above those of more refined but insipid writers."³⁴

At almost the same time as these three writers were stating that Young was possessed of no powers of generalization, he was called "a severe political economist" by Pell.

Beyond this his head was always nearer the ground than the skies. He was no 'mooner.' He understood first principles, and, having mastered them, they became with him fixed principles. . . . First in the ranks of writers on husbandry and rural economy, he was as complete a failure as a farmer. . . . In the business of farming, indeed, many are the examples of brilliant conceptions in the study and conspicuous blundering in the field. In the present day, more even than at the commencement of the century, quackery in the disguise of science prances and parades on the made-up advertising jade in heroic style; while poor time-worn practice, plodding along on the lines of honest study and experience, sometimes scarcely meets with the respect it deserves.³⁵

Pell was, of course, only a farmer, otherwise he would not have dared to call Young an economist. However, fashions change and the pure reasoning, so much detested of Young, must today be based on just such surveys as he was the first to make. Reasoning today, in applied economics at any rate, has to be based in facts. This was just what Young tried to do in his Northern Tour. If he was not so successful as he might have been, few pioneers are, but they line out the track which others may follow. If he had done no more than this Young would have some claim to the title which Rogers so scornfully denied him, but the field survey of farming soon leads to much wider interests. Farming touches humanity at all points. It provides food, leather, wool, clothing, and numerous other commodities. All these become industrial in processing, transport, and marketing, and the attempt to separate farm economics from industrial eco-

³¹ Russell M. Garnier, *History of the English Landed Interest; Its Customs, Laws and Agriculture (Modern Period)*, 337 (London, 1893).

³² *Ibid.*, 330.

³³ *Ibid.*, 331.

³⁴ *Ibid.*, 335.

³⁵ Pell, "Arthur Young," 3.

nomics is quite arbitrary, only existing in the mind of man as an organization of his methods of thinking. Insofar as he was concerned with the cost of production of farm output, Young was an economist, and I am afraid I cannot see where he lacks the power of generalization unless it is because he failed to carry on with his statistical attempts, which may have been impossible for quite other reasons. He had to make a living out of his writings until he was appointed Secretary to the Board of Agriculture, and that alone drove him to a constant output. He had little time to stop and generalize. He was too busy with accumulating data and publishing it, a serious defect in character, no doubt, but the man had to eat. He was inclined to admit that he was prepared to leave collation of the data to others—as he did in the preface to his *General View. . . of Essex*.

It was natural for a temperament like Young's to be attracted by novelties. Helpless as he was in this respect, I think it was a more important defect than his inability, whether due to natural incapacity, or too little leisure for thinking, for generalization. Any novelty was bound to be extolled by Young, and I suspect that some of the novelties that he found so admirable may have deserved the oblivion into which they have since fallen. When he described them he probably raised a controversy about their merits and thus aided progress indirectly by stimulating ideas either antagonistic or favorable. If any harm was done it was to the credulous well-to-do, because the ordinary farmer would only adopt something well tried which he was convinced would bring him in a profit.

Young's early defense of the common farmer is another facet of his character. He was a "good mixer" and was at home in any society—dustmen or dukes. This universality enabled him to obtain information where another man would have failed, and he is likely to have secured some of it, as he said himself in a widely quoted passage, because he could, in an age of toping, hold his own at the bottle.

Young's life is an example of a chance which decides a man's interests. If he had never gone to Bradfield to farm, the improvements of the eighteenth century would still have happened because the steadily growing pressure of population demanded them. However, Young went to Bradfield because he had nowhere else to go, and from that chance he became the prophet of an improved agriculture of such industry that it is wonderful to relate. How he succeeded in finding the time to do all he did is puzzling, but he did it and so left an indelible mark on the history of his time, as well as a history of that time so far as its then major industry, farming, is concerned.

THE EARLY AGRICULTURAL FAIRS OF MISSOURI

GEORGE F. LEMMER

*Department of History
University of Missouri*

During the thirty years preceding the Civil War, many agricultural fairs were held in Missouri.¹ They were sponsored by the agricultural societies that were organized on a county, regional, and state basis in order to effect improvements in livestock breeding and farming practices. The fairs proved to be the most important agency through which this objective was attained. The longevity of the societies was often dependent on the success of the fairs, and they became, therefore, the primary concern of the societies and their leaders.

Probably the first agricultural fair in Missouri was held at the home of William C. Carr of St. Louis County in the fall of 1824. It was sponsored by the St. Louis County Agricultural Society of which Carr was the chief promoter.² However, the Boone County fair, held on October 16 and 17, 1835, has usually been considered the first agricultural exhibition in the State, and it was undoubtedly the first to receive wide attention. The promoters of agricultural improvement in Boone County considered this fair a great success and held that the livestock exhibited compared favorably with any in the older States. The president of the society even contended that Missouri would soon be a rival of her older sisters if the spirit of improvement continued.³

Although there are no reports on the work of the Boone County Society from 1836 to 1840, it may have held exhibits during these years; at least the local newspaper's account of the fair held in 1841 does not refer to it as a revival.⁴ Cooper, Pettis, and Saline counties held fairs in the autumn of 1839, and Cooper also held one in September 1840. Although these county societies seem to have disintegrated by 1842, a society organized at Rocheport by the citizens of Boone, Cooper, and Howard counties held a fair on November 4 and 5 of that year.⁵ The lack of reports in the newspapers indicates that this ended the Missouri fairs for ten years. A marked depression, following the panic of 1837, struck Missouri about 1840, and agricultural improvement was seldom discussed by editors until 1852.

Societies organized for the purpose of holding fairs increased rapidly in number after 1852 and reached their maximum in 1858. In 1852, a new society was

¹ Local newspapers are the only available source of information on the early Missouri fairs. As all of the newspapers and periodicals cited in this article were published in Missouri, the name of the place of publication has not been given when it is indicated in the italicized title.

² *Missouri Republican* (St. Louis), May 18, Dec. 17, 1823, and Nov. 1, 1824.

³ *Missouri Intelligencer* (Columbia), Oct. 24, 1835.

⁴ *Columbia Patriot*, Oct. 9, 1841.

⁵ *Ibid.*, Nov. 17, 1842.

organized in Boone County and in October held the only fair in the State.⁶ This fair received notice and commendation from Ephriam Abbott, editor of the *Valley Farmer*. He expressed the belief that Boone County had started something that would bring "good times" to Missouri.⁷ Although this opinion may seem unduly optimistic, there can be no doubt that this fair began an extensive "fair boom" in the State. In 1853, fairs were held in St. Louis, Callaway, Jackson, Boone, and Monroe counties, and the first State fair was held at Boonville.⁸

Fairs were financed by membership fees paid to the societies, by gate receipts, by the sale of certain articles that were exhibited, and by the rent from booths, stalls, and stables. No one could exhibit articles at the fairs unless he paid a sum equal to the membership fee of the society. The amount was commonly \$5 and entitled a person to exhibit any article he wished and to attend the fair, with his family, at no additional charge.⁹ The admittance fees were usually about the same at the different fairs. Persons on foot were charged 10 cents; horsemen, 20 to 25 cents; one-horse buggies with two persons or less, 30 cents; two-horse vehicles with four or less occupants, 40 cents; and wagons, 50 cents. Persons under fifteen years of age and slaves could get in at half price, and in most cases public hacks were admitted free when the passengers paid 10 cents each.¹⁰

The policy of requiring every one who exhibited produce for a premium to pay a \$5 fee or be a member of the society was a severe burden on the small exhibitor who entered only a few articles and had little opportunity to win a valuable premium. In November 1854, an anonymous member of the Boone County Society wrote a convincing criticism of the practice to the editor of the *Missouri Statesman*. He proposed a plan reducing the membership tickets to \$1.50 or \$2 and making an additional charge of 50 cents for each article entered. Members as well as visitors would be required to pay gate fees. The writer contended that his plan would double the number of members in the society and give the poorer people an opportunity to benefit from the fairs.¹¹ No action was taken on the proposal immediately, but in May 1855 the members adopted an amendment to the constitution of the society which put into effect most of the suggestions of the anonymous writer. By 1860, people competing for premiums were usually required to pay, as an entry fee, 10 percent of the value of each premium.¹² The large exhibitor with ready cash was still favored, however, for

⁶ *Missouri Statesman* (Columbia), Oct. 22, 1852.

⁷ *Ibid.*, Dec. 3, 1852.

⁸ *Ibid.*, Sept. 30, Oct. 7, 21, 1853. In 1854, at least 11 fairs were held; in 1855, 19; in 1856, 21; in 1857, 25; in 1858, 35; and in 1859, 34. *Missouri Statesman*, Aug. 21, Sept. 7, 1855, Sept. 8, 1854, Sept. 5, 1856, Sept. 4, 1857, Aug. 13, Sept. 3, 1858, and Aug. 26, 1859; *Valley Farmer* (St. Louis), September 1855, October 1855, and August 1857.

⁹ *Missouri Statesman*, Oct. 15, 1852.

¹⁰ *Ibid.*, Aug. 26, Sept. 2, 1853.

¹¹ *Ibid.*, Nov. 17, 1854.

¹² *Missouri Statesman*, Apr. 27, 1860.

those who paid \$5 to the treasurer before July 1 of each year were still allowed to exhibit free, and tickets to the fair were furnished to their families. In most cases the families of the life members of a society were admitted to the fairs without charge.¹³ Most of the societies needed money to prepare for the annual fairs so badly that they were forced to encourage the people who could furnish it. Nevertheless, the situation was improved, and, as has been noted, before 1860 most of the fairs charged their fees in proportion to the number and value of premiums contended for by the individual.¹⁴

The great fair at St. Louis, held annually after 1856, made participation easier for the small exhibitors than did the county fairs. Entry fees were charged in proportion to the value of premiums offered, and the board of directors decided to abolish all entry fees in 1859. After this the directors were entirely dependent upon the gate receipts and the rent from booths to pay the expenses of the fair.¹⁵

All fairs were managed by the officers of the society and a board of directors. Minor differences existed in various parts of the State, but they were not significant. The following is a resume of the typical fair regulations: The directors selected three judges to choose premium exhibits, and a judge was replaced on complaint if the objections were valid; No person could enter produce of which he was not the owner, manufacturer, or inventor; The judges reported awards to the secretary without consulting each other; The judges had to deem articles worthy of a premium, as no article was to receive a premium simply because it was the best exhibited; No animal could compete for more than one premium at the same fair except in sweepstakes; No aged animal (four years old or older) could compete in any subsequent fair if he had won a premium, sweepstakes excepted; All animals could compete in sweepstakes except those that had won sweepstake premiums; No cow, bull, jack, jennet, stallion, or mare, five years old or older, could compete for a premium unless it had proved itself a breeder by producing young; The marshal preserved order, superintended the exhibitions, and saw that all stock and other articles were entered in the proper places; Every article and animal on the grounds during the fair was under the control of the board of directors; Persons competing for the largest yields of grain had to have their fields surveyed, an average acre measured, and a certificate signed by three disinterested persons; If possible, an auction was held every day after the exhibitions and there was always an auction on the last day; All premiums were paid in silver plate of high quality; No liquor was sold or consumed on the fairgrounds; The press was always urged to publish notices of the fairs.¹⁶

The details of some of the early fairs are both interesting and revealing. The Boone County Fair of 1835 was held at the race track near Columbia on October

¹³ *Ibid.*, May 4, 1855.

¹⁴ *Ibid.*, Sept. 3, 1858.

¹⁵ *Liberty Tribune*, May 6, 1854, and Aug. 12, 1859.

¹⁶ *Missouri Statesman*, Sept. 10, 1858, and July 27, 1855.

16 and 17. Cattle, sheep, hogs, jacks, and jennets were shown on the first day, and horses and mules on the second. All those wishing to show stock were asked to list them with the secretary on or before October 15. The members of the society were called to meet at the courthouse on October 15 to elect judges and transact other important business preparatory to the fair. On October 24 and 31, the results of the exhibition were published. The premium in each class was a silver cup worth \$10, the second prize being merely a certificate.¹⁷

The reports on the fair indicate that it was relatively small and that most of the stock was owned and exhibited by a few men. Nevertheless, these men felt that they were starting something definitely worth while to the community, and they were well pleased with their first fair.

One of the most interesting and significant points of note is that Missouri already had improved breeds of livestock. Three Merino sheep were entered as well as several Shorthorn cattle. They were currently referred to as Durham, Miller, and Teeswater which were early names for the modern Shorthorn.¹⁸ David Hickman, with his jack and mules, and A. W. Rollins and Theoderick Jenkins, with their "blooded" cattle, were doing pioneer work in improving livestock in Missouri.

The reports on the other early fairs show that they did not differ appreciably from the first Boone County fair. At the Pettis County fair of 1839 and the Saline County fair of the same year, the exhibits of jeans and linsey and the premium for the best acre of corn pointed the way to the later shows which featured a great variety of agricultural and mechanical products.¹⁹

The fairs held after the lapse of the forties offered a much greater variety of exhibits than those held before 1842. There were more classes of entries, and each class was greatly expanded. The farmers evidently experienced a considerable change of attitude toward agricultural improvement after 1852 and were, therefore, more actively interested in fairs and societies. The markets for farm products were becoming better and more accessible than they had been during the preceding decade, and farmers were beginning to realize that it was more profitable to raise good livestock and products than to raise scrubs and use antiquated methods. Perhaps the propaganda spread during the previous years was having some influence. At any rate the interest in fairs increased greatly, and the premiums were larger and more numerous than during the early years.

The Boone County fair of 1853 was typical of those held during the decade. It lasted three days. Mechanical products, domestic manufactures, vegetables, and fowls were exhibited on the first day. The second day, horses, mules, jennets, and jacks were shown, and on the third day, cattle, sheep, hogs, and farm crops. Practically all premiums were paid in silver tableware and silver cups which varied in value from one to ten dollars. The best essay on agricultural

¹⁷ *Missouri Intelligencer*, Oct. 3, 24, 1835.

¹⁸ John Ashton, "History of Shorthorns in Missouri Prior to the Civil War," in Missouri State Board of Agriculture, *Monthly Bulletin*, 21 (11):33 (Jefferson City, 1923).

¹⁹ *Western Emigrant* (Boonville), Oct. 10, Nov. 14, 1839.

improvement was awarded a gold pen and pencil set worth \$10, and the best book printing, a gold pencil worth \$5.²⁰

The fair at Boonville, being a State enterprise, usually had more exhibits and continued longer than the county fairs. People from most districts of the State entered articles for exhibition and attended. Evidence that it was essentially a local institution, however, is found when the list of premium awards is examined. In 1854, Boone, Cooper, and Howard counties won 156 of the 205 premiums awarded. Cooper, the county in which it was held, won the most with 89, and Boone was second with 45. The farmers of the nearby counties were favored because they did not have so far to transport their products. Facilities were not yet adequate to insure that all districts would be represented at a central fair.²¹ In spite of the fact that Boonville greatly expanded the facilities at its fairground, the State soon created five districts with a State fair in each.²²

Although the fairs in western Missouri did not differ in any essential respect from those already described, there were some minor variations that should be noted. The fair at Liberty was the first in Missouri to adopt the modern practice of awarding blue ribbons for first prize and red ribbons for second-prize articles.²³ The Clay and Clinton county fairs offered premiums for the best timothy, clover, bluegrass, and orchard grass. Prizes were given for the best cultivated farms and gardens, and there was more attention to sheep and vegetables and less to tobacco than to the eastward.²⁴ In general, the western fairs placed greater emphasis on grass and pasture lands and method of cultivation than the eastern counties, which put so much stress on the breeding of fine Shorthorn cattle and mules that the other aspects of agriculture were overshadowed. This was a common fault of the early movements toward agricultural improvement in the United States during the fifties.²⁵

Public interest in the fairs grew rapidly after 1852. According to the secretary, there were four hundred members of the State agricultural society, and four thousand people attended its fair on each of the last two days it was held in 1853.²⁶ There are no exact figures of the increase in membership or attendance over the next few years, but indications of the growing interest are found in the

²⁰ *Missouri Statesman*, June 17, 1853.

²¹ *Ibid.*, Nov. 3, 10, 1854.

²² *Boonville Observer*, July 7, 1855; *Missouri Statesman*, Sept. 22, 1854.

Ephriam Abbott, editor of the *Valley Farmer*, wrote a long discussion of the State Fair of 1854, in which he criticized its management. He believed that most of the activities of the first three days could have been carried out in one day if the plans had been well laid. He also complained that the exhibits were not left on the fair grounds long enough for all farmers to see them. He considered the fair as a whole, however, a great success, and calculated that there were fully 8,000 people present on the fifth day. See the *Valley Farmer*, November 1854.

²³ *Liberty Tribune*, Sept. 15, 1854.

²⁴ *Ibid.*, July 21, 1854, and July 16, 1858.

²⁵ Percy W. Bidwell and John J. Falconer, *History of Agriculture in the Northern United States, 1620 to 1860*, p. 223 (Washington, 1925).

²⁶ *Missouri Statesman*, Sept. 11, 1857.

publication of premium lists and gate receipts. For example, in 1855, the directors of the State society increased the total amount of premiums about \$500 over the year before.²⁷

Attendance figures were seldom published for the Boone County fair, but gate receipts were, and the newspapers usually noted the increase over the previous year. In 1853, gate receipts were reported to be \$308.50; in 1855, \$548.15; and in 1860, \$1,374. As admission charges were increased very little during this period, the increase in receipts was due almost entirely to greater popularity.²⁸ Attendance at the first Clay County fair in 1854 was estimated at about four thousand persons. In 1857, seven to eight thousand people were reported present on the best days, and \$1,306 was taken in at the gate.²⁹ It would be unwise, however, to put too much confidence in the statements concerning the attendance at the different fairs because the newspapers always boasted about those in their respective counties. In spite of this rivalry, however, editors were unusually consistent in reporting attendances and winners of premiums. It is interesting and significant, too, that there were very few accusations of injustice on the part of judges.

Improvements were continually being made in the fairgrounds of the different societies. Buildings, stalls, booths, and exhibition tables were added, and practically all the societies were forced to purchase additional grounds in order to have space for their exhibitions. Boone County's society bought more land in 1858, and Clay, Jackson, and most of the other societies took the same action before 1859.³⁰ The continuous growth of both premium lists and fairground equipment is evidence that public interest in fairs continued to grow.

The most extensive agricultural show in Missouri before the Civil War was the one held by the St. Louis Agricultural and Mechanical Association after 1856.³¹ This society probably had the finest fairgrounds in America.³² In the autumn of 1856, the *St. Louis Republican* and several other newspapers published a vivid description of the fairgrounds which were then being completed. The land, a square 50-acre plot, cost the society \$50,000. The amphitheater, together with the other buildings, provided shelter for 50,000 people in case of rain, and cost \$15,000. The show ring inside the amphitheater was 250 feet in diameter. In addition, the society erected a pagoda or East Indian temple costing \$2,500, a cottage for women visitors, a Floral Hall for the exhibition of fine arts, and about 300 stables to accommodate livestock.³³ At the first fair, 1,300 premiums were offered, valued at \$10,000.³⁴

²⁷ *Ibid.*, May 11, 1855.

²⁸ *Ibid.*, Oct. 14, 1853, Oct. 5, 1855, and Oct. 5, 1860.

²⁹ *Liberty Tribune*, Oct. 20, 1854, and Oct. 16, 1857.

³⁰ *Ibid.*, Aug. 10, 17, 1855, Oct. 10, 1856, and July 3, 1857; *Missouri Statesman*, Aug. 27, 1858.

³¹ *Missouri Statesman*, Oct. 24, 1856.

³² Lewis Cecil Gray, *History of Agriculture in the Southern United States to 1860*, 2:786 (Washington, 1933).

³³ *Valley Farmer*, August 1856; *Missouri Statesman*, Oct. 10, 1856; *Boonville Observer*, Oct. 4, 1856.

³⁴ *Missouri Statesman*, Oct. 10, 1856.

An idea of the interest in this fair can be obtained by examining reports of the gate receipts in 1860. Receipts for the first day were \$2,150; for the second, \$2,947.50; third, \$4,403.60; fourth, \$10,139.10; fifth, \$3,752.40; and for the sixth, \$3,629.40. The sale of booths and the like brought in about \$10,000, and the rent on livestock stalls totaled \$700. As reported, the total receipts came to \$37,721.³⁵ The newspapers did not give an estimate of the attendance that year, but in the summer it was expected that a hundred thousand people would be there every day. With such attendance, one can understand why the directors were able to abolish all entry fees.

The fairs evidently did much to encourage farmers and livestock breeders to improve their methods. Farmers could see the results of superior methods of breeding and cultivation at the fairs and could get first-hand information from men who were experimenting with imported stock and new farm machinery. The fairs, in fact, furnished the best, and sometimes the only, opportunity to observe and learn about different breeds of livestock, new methods of cultivation, and efficient machinery.³⁶

Articles in the newspapers concerning the value of fairs were numerous throughout the period, except during the lapse of the forties which has already been discussed. The *Liberty Tribune* published a series of the best of these articles between 1856 and 1859. The general conclusion was that a great impetus had been given to agricultural and mechanical improvement over the last few years by the holding of fairs in the various sections of the State. The authors pointed out that the fairs were certain to bring greater improvement in the future and urged farmers and stockmen to give hearty support to the exhibitions.³⁷

One of the greatest benefits of fairs was their part in distributing improved livestock over the State. Practically all of the fairs had auction sales in connection with the exhibitions, and some had them every day.³⁸ These sales enabled farmers from different parts of the State to acquire better hogs, cattle, and sheep, and undoubtedly increased the rate at which imported stock was distributed. In 1852, there were only a few purebred cattle in Missouri, and these were located in the central part, but by 1858, they could be found in most regions of the State.

The editor of the *Valley Farmer*, Missouri's outstanding farm journal, had

³⁵ *Ibid.*, Oct. 12, 1860. In reporting on the St. Louis Fair in 1857, Norman J. Colman, editor of *Valley Farmer*, said that it had become the "great fair" of the Mississippi Valley. Because of the great variety of exhibits and the mass of information available there, he believed it "almost indispensable that farmers attend." See the *Valley Farmer*, November 1857.

³⁶ Wayne C. Neely, *The Agricultural Fair*, 85-95 (New York, 1935).

Norman J. Colman, editor of *Valley Farmer* after October 1855, attended many of the fairs over the State and often delivered addresses at the fairgrounds. He always insisted that fairs were very important to the communities which held them and continuously urged the people to take an active interest in the work. In 1857, he published an article in which he advised farmers to have meetings at the fairs and discuss their problems. See the *Valley Farmer*, November 1856, and August 1857.

³⁷ *Liberty Tribune*, Nov. 14, 1856, and June 10, 1859.

³⁸ *Missouri Statesman*, July 27, 1855.

great hopes for the future of agriculture in the districts where fairs were held annually. The prevalence of this same conviction among most newspaper editors and agricultural leaders lends weight to the assumption that fairs had a remarkable influence on improvement.³⁹ There were, however, other factors at work. Better transportation facilities and better markets were being opened to the farmers at the same time that fairs were becoming popular, adding a great stimulus to the desire for better livestock and better machinery. In reality, this development was probably fundamental to the changes that took place, but they could not have been as rapid or efficient without the societies and fairs.

Not of the least value to farmers were the recreational opportunities offered at the local and regional fairs. Christmas celebrations, the Fourth of July, and the county fair were three big events in the lives of pioneer farmers. Long hours of toil and comparative isolation made life for the country folk hard and monotonous. The county fair was one of the few gatherings they could attend with both profit and pleasure. The numerous contests offered much excitement and pleasure even for those who were only spectators. Here was an opportunity to meet and talk to people from other parts of the State. Unusual sights were often encountered on the fairgrounds. Among the most common were trained elk, wild buffaloes, Brahman cattle, human dwarfs and giants, and hogs or sheep with more than the natural number of feet.⁴⁰ A brass band nearly always furnished music at the fairs, and most of them held a grand ball on the last evening.⁴¹

The fairs performed two major functions for the farmers who took part. They were the first agencies through which a vast amount of information was distributed in the communities where they were held, and they were the important annual celebrations in which the farmers could take part. Besides acquainting the farmer with improved livestock, machinery, and methods of cultivation, the fairs gave him a conception of his own importance in the expansion of the country and inspired him to take a more active part in the growth and improvement of agriculture.

³⁹ *Boonville Observer*, Oct. 6, 1855.

⁴⁰ *Missouri Statesman*, Oct. 1, 1858.

⁴¹ *Liberty Tribune*, Sept. 29, 1854.

THE HISTORIOGRAPHIC SETTING OF TURNER'S FRONTIER ESSAY

COMMENTS ON THE OCCASION OF ITS FIFTIETH ANNIVERSARY

FULMER MOOD

University of California, Berkeley

Fifty years ago this month—on July 12, 1893, to be exact—Frederick Jackson Turner first gave public expression to that special interpretation of American history with which his name has come to be so intimately connected. The occasion was his appearance before a session of the American Historical Association in Chicago. The paper that he read to his fellow historians was the now celebrated essay, "The Significance of the Frontier in American History." A quarter century later, the frontier doctrine had carried nearly all before it, and few ventured to dispute its propositions. Today, however, the initial easy victory has been replaced by a tardy examination, leading, as a result, to attack, defense, and counterattack.

It is not my immediate concern to consider the present status of the doctrine. Rather I wish to draw attention to the situation of American historical writing in 1893. Considered in relation to the body of American historical scholarship of that time, what was the nature and quality of this paper that Turner delivered? To answer this question will require a short survey of American historiography.

The dominant influence in American historical writing from 1834 to about 1875 was George Bancroft, whose gigantic *History of the United States* supplied aspirants for historical honors with an impressive example of the historian as a maker of narratives. Bancroft had set himself the task of writing a history of his country from its dim beginnings in the age of the Norse voyagers, but, though he lived to be over ninety, he did not attain his goal. To prepare a narrative relating the principal events of general United States history was a task too great for even his admittedly immense capacity for work.

Edward Channing, born more than a half century after Bancroft, took for himself the identical task, and his goal was made more difficult of attainment by the fact that in the meantime the standards of historical technique had risen and the quantity of historical materials which had to be consulted had multiplied many times. Channing

set out to write a complete general narrative of the country's history, but at his death in 1931 he had fallen short of the mark.

Between Bancroft and Channing stands the name of Justin Winsor, who respected so much the idea of a general narrative account of American history that he could not resist engaging in the attempt to create one himself. But wise in his generation, he knew that he could not do so unaided. He drew up an ambitious plan for a history to extend from the fifteenth into the nineteenth century and then called in scholarly associates who, under his guidance, piled fact thick on fact, till the numerous massive volumes of the *Narrative and Critical History of America* came complete at last from groaning presses.

James Schouler and Henry Adams did not forswear general narrative history as a fit object for their scholarship, but they set limits to their ambitions. Their caution and reasonableness owed something to Bancroft's example and, likewise, to his frustration. Schouler deliberately set out in 1873 with the intention of completing Bancroft's work. Thus Schouler began his history with the establishment of the Federal Government; the title of his work was *History of the United States under the Constitution*. Henry Adams took a still more modest field to till: the administrations of Jefferson and Madison. His nine volumes were completed and published by 1891, the very year in which Bancroft breathed his last. Adams finished the circumscribed task he had set for himself; Schouler tardily reached the period of Lincoln.

The narrative historian who selected some large subject and worked successfully at it enjoyed great prestige fifty or sixty years ago. Men respected the accomplishments of a Bancroft, a Parkman, a Schouler, or an Adams. When an ironmaster's son in Cleveland, Ohio decided to write history, he, of course, chose to write it in the accepted mode. James Ford Rhodes published in 1893 the opening volumes of his *History of the United States from the Compromise of 1850*. Such a work was the only kind of history he could have conceived of, given

his circumstances and condition. It was general history, but general history limited in time. Bancroft's successors had learnt wisdom.

Rival of the general narrative historian was the monographic historian. The latter came into his own when the universities, importing German seminar methods, offered graduate instruction in historical methods. Herbert Baxter Adams of Johns Hopkins bred up a good number of these monographic historians. Others of the type emerged from seminars at Columbia, Chicago, and Harvard, so that by 1893 enough examples of the historical monograph had been published to prove to all and sundry that German industry and German thoroughness had taken root in the United States. The published doctoral dissertation had abundantly manifested itself. Doctoral series had been established. Exhaustive investigation of a relatively small but important topic began to be the rule. The generalist was being supplanted by the specialist.

The generalists were not prolific. The line of Bancroft counted but one successor in the twentieth century, namely, Channing, and his line was sterile, for he had no student who sought to do what the master had undertaken to do. However, the monographic historian has been prolific indeed; we of today are all of us, more or less remotely, children of Herbert Baxter Adams. The maker of monographs has claimed the immediate past and the present for himself; it looks as though he had a firm grasp on the future as well. Our library shelves sag beneath the weight of the products of monographic zeal. As a result, our knowledge of American history has been vastly enriched, and thereby scholarship has undoubtedly been the gainer.

It needs no arguing of the point to prove that "The Significance of the Frontier in American History" is neither a general history nor a monograph. It is something else, something quite different from both forms. Turner ignored the form of the general narrative history, never attempting it. He twice undertook the task of composing history in the monographic form, or, rather, he selected a particular topic for monographic treatment, and twice carried his task through to a successful completion. Thus, in 1889, he published "The Character and Influence of the Fur Trade in Wisconsin," which was issued in 1891 in "rewritten and enlarged" form as *The Character and Influence of the Indian Trade in Wisconsin:*

*A Study of the Trading Post as an Institution.*¹ Having acquainted himself with the problems and methods of constructing the historical monograph, Turner gave no more heed to it for himself. As for his students, he trained them in its construction, and in due course they brought forth an abundant crop.

The whole drift of Turner's creative activity was opposed to the "staggering accumulation of unrelated observations." He wanted *meaning, significance*. For an intelligent graduate student the production of a sound and scholarly monograph in history was not an insuperable task. The technique had been elaborated; given industry, the work could be accomplished. The difficulty in the whole performance resided in the choice of the subject to be exploited. With the general narrative historians, this selection of a theme was not so taxing. Schouler aimed to complete Bancroft, and Rhodes, thinking that Schouler would hardly get beyond 1850, elected to begin with the year of the Compromise. All of these men chose to write on the history of the country as a whole, and who was there willing to assert that American history was not a subject worthy of a man's time and energy?

The monographic writers, on the other hand, had a bewildering field from which to pick a subject that interested them. The titles of the Johns Hopkins University Studies in Historical and Political Science show how far these scholars ranged even before 1900. Indeed, diffusion of energies could easily manifest itself in waste of scholarly endeavor. Random selection of topics was dangerous, perhaps wasteful, because there was no guarantee that the topic selected was truly significant or valuable.

Turner faced this problem of trying to find a canon for selection of valuable research possibilities soon after he began leading seminars at Wisconsin. In November 1892, in the *Aegis*, the undergraduate newspaper at Madison, he published "Problems in American History."² This abounds with specific suggestions of problems that await the future historical investigator. In spite of all the activity of half a century, the research possibilities of this program have not been ex-

¹ See Everett E. Edwards, "Bibliography of the Writings of Frederick Jackson Turner," *The Early Writings of Frederick Jackson Turner*, 233-272 (Madison, Wis., 1938).

² For the text of this article, see *ibid.*, 71-83.

hausted. In "The Significance of the Frontier in American History," Turner, as I have noted elsewhere, sought "to put more stress on his principle of interpretation, and less on the proposals for research, than he had done in the *Ægis* article."³

Turner's reading of the sources taught him that the American population had engaged in two great enterprises. One was the building of cities. The other was the extension of the frontier. The study of the latter was the more important because the existence and extension of the frontier were facts peculiar to American history. Europe had nothing like them, whereas city life and urban communities were common to both Europe and America. Thus the study of the frontier was the study of the *more American part* of American history. In this way he reached his canon of selection. Topics relating to westward growth and expansion were therefore significant. The celebrated essay on the frontier supplies the principle of interpretation to be followed in conducting such researches. Yet this frontier interpretation was not thought of as something provincial, or "western" in a narrow sense. It was an interpretation of moment and importance "in American History" as a whole. Turner was championing no local or provincial loyalty. He spoke as a scholar with a vision as wide as this continent, or wider!

In his essay on "The Significance of the Frontier in American History," Turner demonstrated that he was a historical thinker.⁴ With his dissertations

³ Fulmer Mood, "Turner's Formative Period," *ibid.*, 38.

⁴ Fulmer Mood, "The Development of Frederick Jackson Turner as a Historical Thinker," Colonial Society of Massachusetts, *Transactions*, 34:283-352.

he had already shown that he was a competent historian. Historians of this sort are numerous, but historical thinkers are always rare. Richard Hildreth was such a man, years before, as is Charles A. Beard in our time. The historical thinker is a fertile mind, evolving new interpretations and ideas. He delights in throwing off an abundance of suggestions. He hews to no one line, exercises no constricting influence, and refuses to sacrifice his students to the upbuilding of his own reputation. The ideas he copiously generates, his students are free to pick up and exploit, or to ignore, as they see fit. As for the master, the production of thoughts that enable others to look at familiar facts with a new insight is his supreme satisfaction. He never hopes to develop all of his ideas into finished studies, even in essay form. He knows that twenty lifetimes would not suffice for the scientific working up of the richness of thought and suggestion at his command.

In taking notice of July 12, 1893, we historians are paying tribute to a historical thinker (as opposed to a historian) and to the essay in which he gave utterance to a fertilizing and provocative approach. This essay proposed a number of topics that were thought to be worthy of serious investigation by young scholars, and it affirmed a principle of interpretation that they could make use of in their studies. It was destined to be the parent of unnumbered monographs and research articles. Right it is, then, that at this time we remember with respect Frederick Jackson Turner, historical thinker, for he was the sole example of the species on the American scene at that time.

COLONIA TOVAR, VENEZUELA

WAYNE D. RASMUSSEN

*Bureau of Agricultural Economics
United States Department of Agriculture*

Venezuela has enough unused and cultivable farm land to supply a considerable number of immigrants. It has an area of 352,143 square miles and is, therefore, slightly more than five times the size of Missouri. However, its population of 3,839,747 in 1941 is about equal to that of Missouri. Furthermore, the population is concentrated in the northern highlands. The states of Nueva Esparta, Carabobo, Aragua, Miranda, and the Federal District alone contain 26 percent of the inhabitants but only 2 percent of the area.¹

Since 1936, Venezuela has been taking active steps to encourage immigration, and in 1939 it established a Technical Institute to deal with directed immigration and to set up agricultural colonies. These efforts have been of necessity restricted with the outbreak and spread of World War II, but the Government is at present engaged in organizing agricultural colonies for its unemployed.

In the attempts to encourage agricultural settlement and alleviate the concentration of Venezuela's population, a study of Colonia Tovar may be useful, for it is the only Venezuelan agricultural colony settled by immigrants since the colonial era that has survived to the present time. Many have been founded or settled by such diverse groups as Frenchmen, American Confederates, Englishmen, Italians, Germans, and, most recently, Danes, but all have failed, and the immigrants have returned to their homelands, died out, or abandoned the colonies for other parts of Venezuela or other countries.

Agustín Giovanni Battista Codazzi, the moving spirit in the founding of Colonia Tovar, was born at Lugo, Italy, in 1792. He served in an Italian army and took part in some notable battles. In 1815, he became a commercial traveler and in this capacity covered a large part of Europe. At

Amsterdam, he heard of Bolívar's struggles in the war for Latin-American independence and was so impressed that he sailed to Baltimore and joined Admiral Villaret's expedition in 1817. He spent six years in the service of Colombia and then returned to Europe. In 1826, he was back in Colombia. Santander made him a lieutenant colonel of artillery, and he spent the next few years mapping various areas. When Venezuela and Colombia separated in 1831, Codazzi was commissioned by the Venezuelan Government to map all the provinces of the new republic. This work occupied him from 1831 to 1838. In the latter year, he was awarded the title of colonel and assigned to the exploration of Guyana. On his return from this mission, Codazzi was given a grant by the Venezuelan Congress to enable him to publish the results of his work. He thereupon went to Paris and in 1841 published his well-known volume, *Resúmen de la geografía de Venezuela*.²

On September 17, 1840, Angel Quintero, Venezuelan Minister of the Interior and Justice, dispatched a letter to Codazzi, then in Paris preparing his material for publication, asking him to advise the Government as to what parts of Venezuela were most suitable for immigrants.³ This was in accord with a general increase of interest, at least on the part of the Government, in promoting immigration. A new immigration law of May 12, 1840 had elaborated somewhat on the previous law of 1837.⁴ Furthermore, a decree of the Vice President on August 27, 1840 appropriated 25,000 pesos to encourage immigration and set up immi-

² Pierre Larousse, *Grand dictionnaire universel du XIXe siècle*, 4:520 (Paris, n. d.).

³ "Exploración de las montañas comprendidas entre La Victoria y el litoral del Mar Caribe, por el Coronel Agustín Codazzi (Boletín de la Colonia Tovar, nos. 1-5, August 1843-January 1845)," in Alfredo Jahn, compiler, "La Colonia Tovar," *Boletín de la Sociedad Venezolana de Ciencias Naturales*, 3(21): 3 (April-May-June 1935). Hereafter cited as "Exploración de las montañas . . . por el Coronel Agustín Codazzi."

⁴ Venezuela, *Recopilación de leyes y decretos de Venezuela*, 1:582-585 (Caracas, 1874).

¹ Venezuela, Ministerio de Fomento, Dirección General de Estadística, *Anuario estadístico de Venezuela*, 1940, p. 5 (Caracas, 1941); Juan Martino Boggio, "Breves comentarios sobre los resultados preliminares del séptimo censo nacional de población," *Revista de Fomento*, 4(47): 78 (April-May-June 1942).

gration societies in Cumana, Caracas, and Maracaibo.⁵

Codazzi informed Quintero on January 15, 1841 that he did not have sufficient information at hand to make a detailed reply to the request but that he was planning to return soon to Venezuela and would then make a full report. Quintero's letter apparently gave Codazzi the idea of founding a colony, for he at once began to investigate the possibility of securing immigrants. He talked over his plans with Jean Baptiste Boussingault and Alexander von Humboldt, travelers and scientists who had made extensive explorations in Venezuela.⁶

Codazzi had hired a copper-plate engraver, Alexander Benitz, from the village of Endingen, Baden, to do the cartography for his book. As Benitz worked on the volume, he became enthusiastic over the future of Venezuela and decided to join Codazzi in promoting a colony. He wrote to friends in Baden and aroused much interest. However, these friends wanted exact details as to the site of the future colony, so when Codazzi returned to Venezuela, Benitz accompanied him.⁷

Early in August 1841, Codazzi and Benitz arrived at La Guaira. Benitz went to Caracas while Codazzi began to explore the coastal mountains. Codazzi felt that the success of the entire colonization project would depend on the suitability of the site of the first settlement. He chose the coastal mountain area because its nearness to the sea and to the largest population centers would facilitate the marketing of produce, while the mountain climate would permit Europeans to work the land.⁸

After making four trips into various parts of the coastal mountains, Codazzi decided to explore the woods north of La Victoria. With food for eight days, he left La Victoria on October 11, 1841, accompanied by Ramón Díaz, José Hidalgo, and twelve peons. Díaz, it may be noted, was a Venezuelan historian who had aided Codazzi in writing his geography and later helped found the colony. The party found a guide, but it soon became obvious that he was not familiar with the

territory. The men were on foot, the country being much too steep and broken to permit the use of saddle or pack animals. On October 13, the group discovered a valley with gentle slopes, well-watered, and with a soil that was apparently deep and fertile. Díaz was so impressed with the advantages of the site that he offered to join the enterprise if Codazzi founded his colony there.⁹ On October 15, the travelers continued north toward the sea which they reached, only after considerable hardship and several days of travel, at Puerto La Cruz, about 29 miles west of La Guaira. Having secured new supplies and a more competent guide, the group began the return trip from the little port of Maya and reached La Victoria on October 28, seventeen days after they had first left it.¹⁰

Codazzi's enterprise lacked two essentials: land and money. Both of these problems were solved when Martín Tovar Ponte, a wealthy, sixty-year-old patriot who was highly respected throughout the Nation, came to his support with an offer to act as sponsor or guarantor of the colony. Tovar's nephew, Manuel Felipe Tovar, also took an interest in the enterprise and donated two square leagues of the land which Codazzi had explored. In tribute to these gentlemen, Codazzi determined to call the projected settlement Colonia Tovar.¹¹

Codazzi wrote out his plans for the colony in considerable detail and submitted them to the Venezuelan Government in November 1841. He stated that he wished to establish the colony, not for the financial returns, but to serve as a model that would succeed in attracting a steady trek of immigrants to Venezuela. He hoped to bring in Germans and pointed out that the United States of America had benefited greatly from its German settlements. He believed that German immigrants, settled on the proposed site under careful guidance, would be happy and successful and would induce thousands to follow their example. Only the best type of immigrants was to be brought in, and certain concessions would, therefore, be necessary, but Codazzi believed the results would justify such action.¹² According to the plan, the colony

⁵ Francisco González Guinán, *Historia contemporánea de Venezuela*, 3:154 (Caracas, 1910).

⁶ "Exploración de las montañas . . . por el Coronel Agustín Codazzi," 3-4.

⁷ *Ibid.*, 4; Hermann A. Schumacher, *Südamerikanische Studien; Drei Lebens- und Cultur-Bilder; Mütis, Córdas, Codazzi, 1760-1860*, p. 322 (Berlin, 1884).

⁸ "Exploración de las montañas . . . por el Coronel Agustín Codazzi," 4-5.

⁹ *Ibid.*, 5-8.

¹⁰ *Ibid.*, 9-21.

¹¹ Schumacher, *Südamerikanische Studien*, 319.

¹² Agustín Codazzi, "Informe del Coronel Agustín Codazzi al Secretario de Estado en el Despacho del Interior y Justicia," in Alfredo Jahn, compiler, "La Colonia Tovar," *Boletín de la Sociedad Venezolana de Ciencias Naturales*, 3(22): 53-58 (July 1935).

would eventually comprise 30,000 inhabitants and 11 villages. The principal village or town would contain 8,000 persons and would be located in the center of the colony, 5 leagues (about 16 miles) from the port of Maya and 6 (about 19 miles) from La Victoria. Highland areas in other parts of Venezuela could also support large numbers of settlers.¹³

However, there were two prerequisites to the success of the colony. Roads had to be built and the land cleared. The necessity for roads was obvious. The reason for having the land cleared before the colonists arrived was that Codazzi felt that Europeans could not undertake such work and survive. He stated that the exhalations from decaying vegetable matter and from soil exposed to the sun's rays for the first time could be borne only by natives and would be fatal to the immigrants. Codazzi therefore planned to get these two projects under way and then go to Europe to recruit colonists. According to his schedule, the immigrants, 60 or 80 families, would arrive at Maya in November 1842 and would transport their goods to the colony by pack animals. After resting and becoming acclimated for a few weeks, the colonists would begin their farm work, devoting three days a week to the property of the chief of the colony and three days to their own lots. They would learn correct methods of agriculture on the chief's estate and would apply this knowledge in working their own plots. Work on the estate would be paid for at the prevailing wages for laborers. The colonists would be advanced provisions, clothing, and so on, to be paid for after the sale of crops.¹⁴

Codazzi needed money to finance the undertaking. He expected to receive 20,000 pesos from the provincial committee, at the rate of 5,000 pesos a year, but he pointed out that this sum would cover only half the estimated costs of road construction and leave nothing for the other expenses. He therefore asked that the Government advance from 40,000 to 60,000 pesos, according to the needs and number of the families brought in. He asserted that the money would insure the success of the colony. This, in turn, would induce many other immigrants to enter the country, and its fertile lands would soon be populated and productive. The Government was further insured against

loss by Martin Tovar's agreeing to act as guarantor of the project.¹⁵

Quintero sent a copy of Codazzi's report and comments on it to Congress along with a copy of a decree issued on November 26, 1841. According to the decree, the Government would loan Codazzi 15,000 pesos, payable in three installments, in December 1841, January 1842, and February 1842. As the colony developed and the need for additional financial assistance was shown, further amounts up to a total of 60,000 pesos might be loaned. The money was to be repaid in accordance with the law. Codazzi was to agree to bring between 60 and 80 families into the country within eighteen months and the contract was to be guaranteed by Tovar.¹⁶

The manager of the colony was directed by the decree to comply with the following rules: (1) Only honest, industrious, and healthy families were to be admitted; (2) Preference was to be given to families in which the children were old enough to work; (3) A physician and a priest should be installed in the colony; (4) Specific articles of the immigration law should be complied with; (5) Artisans, particularly masons, carpenters, blacksmiths, weavers, stone workers, shoemakers, and tailors should be brought in if possible; (6) Huts or other buildings should be constructed for the immigrants, and after their arrival arrangements should be made to construct a chapel or at least an oratorio; (7) A plan of the colony, drawn to scale, was to be submitted to the Government; (8) A report on the colony should be transmitted to the Government every six months with a table of births, deaths, and marriages by months; and (9) The 15,000 pesos to be advanced would be available as previously mentioned when the contract and guarantee called for had been made.¹⁷

Quintero pointed out in his comments that the sum to be immediately advanced was restricted to 15,000 pesos because a larger amount would use up the appropriation available for the promotion of immigration and some funds might be

¹³ *Ibid.*, 62-63.

¹⁶ Anjel Quintero, "Informe que en su memoria de 1842 presenta el Secretario en el Despacho de Interior y Justicia al Congreso sobre el plan de colonización presentado por el Coronel Agustín Codazzi," in Alfredo Jahn, compiler, "Documentos para la historia de la Colonia Tovar," *ibid.*, 4(34): 371-372 (May-June 1938).

¹⁷ *Ibid.*, 372-373.

¹³ *Ibid.*, 58-59.

¹⁴ *Ibid.*, 60-62.

necessary to bring agricultural laborers into the country. According to Quintero, Codazzi had selected the land for his colony and had already started the work of clearing it and of opening roads. Before Codazzi left for Europe to obtain immigrants, he would see that the construction of buildings was under way and would arrange for domestic animals and other things necessary for the colony. All in all, Codazzi's plans were entirely in accord with those of the Government.¹⁸

Considerable enthusiasm was aroused in Caracas over the proposed colony. People thought that the plan was certain to succeed and saw in its success the inauguration of a mass migration to Venezuela.¹⁹ Naturally, the settlement was given publicity, both in Venezuela and in Europe.

On February 10, 1842, Codazzi issued a prospectus for the colony which included a map showing the proposed locations of the towns and roads. In the first paragraph, Codazzi stated that the establishment of the colony would resolve the question as to whether the Venezuelan mountain regions were suitable for European colonization.²⁰ However, any one reading further could hardly doubt that the colony was assured an immediate and far-reaching success. Codazzi described the physical setting of the colony in glowing terms and paid tribute to Manuel Felipe Tovar for donating the land and to Martin Tovar for guaranteeing the undertaking. Where a sad silence had reigned supreme, ax blows were ringing out as trees centuries old were felled. The aspect of the land would soon be transformed by crops, and more and more land would be opened to cultivation.²¹

With the aid of 200 workmen furnished by the Government, Codazzi had built a road from the colony to La Victoria. This put Colonia Tovar into direct communication with the Aragua Valley, the richest and most populous part of Venezuela. A road was planned to Maya and another to Caracas. In fact, Codazzi hoped that a railroad connecting the capital with the colony would be constructed as soon as it was well under way.²²

¹⁸ *Ibid.*, 375.

¹⁹ Schumacher, *Südamerikanische Studien*, 317, 319.

²⁰ Agustín Codazzi, "Prospecto de la empresa de la Colonia Tovar presentado por el Coronel Agustín Codazzi," in Alfredo Jahn, compiler, "La Colonia Tovar," *Boletín de la Sociedad Venezolana de Ciencias Naturales*, 3(22): 64 (July 1935).

²¹ *Ibid.*, 65-66.

²² *Ibid.*, 66-67; Schumacher, *Südamerikanische Studien*, 320.

The slopes were suitable for cultivation, and a fertile and deep soil was indicated by the large trees and luxuriant vegetation, kept always green by the mists and rains found at that altitude. The climate was equable. A great variety of crops could be successfully grown; those of the temperate zone were particularly suitable. Codazzi announced that Ramón Díaz had become associated with the enterprise and that his help would be valuable and also paid tribute to the various officials interested in the project.²³

The Caracas newspaper, *El Liceo Venezolano*, published an account of the colony, apparently based upon the aforementioned prospectus, in an extra issue of February 1842. The newspaper seemed especially enthusiastic over the prospect of German immigrants and called them "a sober people, industrious and ingenious, of friendly manner and of an unaggressive nationality, that would bring about no entanglements between the motherland and the adopted land."²⁴

An article by Sabin Berthelot, based on the account in *El Liceo Venezolano* and communications from Codazzi, appeared in Paris in the July 1842 issue of the *Bulletin de la Société de Géographie*. According to this article, the Venezuelan Government was now stable, and it did not seem likely that there would be any more revolutions. As subsequent events were to prove, this statement was much too optimistic. After reviewing the prospects of the colony, largely quoting from its founder, Berthelot stated that Codazzi expected to return to Paris very soon and then go to Germany to recruit the families which were to form the nucleus of the settlement. In conclusion, it was suggested that the enterprise might well result in the founding of great cities and a flourishing civilization, and in that case future historians would look back to this account for the story of the beginnings of the undertaking.²⁵

There was a certain amount of exaggeration or misemphasis in most of these accounts of the prospects of the new colony. Yet, in many respects, the soil and climate were well suited for

²³ Codazzi, "Prospecto de la empresa de la Colonia Tovar . . .," 67-71.

²⁴ P. J., "Eine deutsche Kolonie in Venezuela," *Export* (Berlin), 3:355 (June 14, 1881).

²⁵ Sabin Berthelot, "Notice sur les nouveaux établissements agricoles fondés au Vénézuëla; Extrait du *Liceo Venezolano* . . .," *Bulletin de la Société de Géographie* (ser. 2), 18:47, 53-55 (July 1842).

European settlement. The village of Colonia Tovar is situated at 10°25' north latitude and 67°17' west longitude. Its altitude is 5,879 feet above sea level according to the recent geodetic surveys of Alfredo Jahn, but some of the houses of the settlement lie as high as 6,791 feet.²⁶ The area is thus in the upper limits of the subtropical zone or *tierra templada*. Codazzi estimated that the mean temperature of the colony was about 59 degrees Fahrenheit, and he expected that the mean would increase to 66 degrees after the land had been cleared.²⁷ However, various series of observations made at different periods in the past century are in very close agreement with Codazzi's first estimate; they put the figure at about 59 or 60 degrees, indicating that the clearing of the land has had little effect and that the annual mean temperature has remained almost unchanged for a century.²⁸ There is considerable variation between day and night, but the mean from month to month throughout the year seldom varies more than 3 or 4 degrees. During the six years, 1930-1935, the lowest temperature recorded was 37 degrees and the highest 77 degrees. In the same period, the average yearly rainfall was 55 inches.²⁹ The rainfall varies considerably from month to month and from year to year. January, February, and March usually comprise the dry season, and the precipitation is often slight in December and April.³⁰ The annual average temperature and rainfall of Colonia Tovar is very similar to that of Greenville, South Carolina. However, the climate of Greenville is much more variable from month to

month, season to season, and year to year. It is hotter in summer and colder in winter. Killing frosts occur regularly in Greenville but are almost unknown in Colonia Tovar.

Most accounts of the colony agree that the soil is fertile when first put into use but that it must be kept up by manure or commercial fertilizer. There is a tendency toward erosion of the fields on the valley slopes. The climatic conditions seem suitable for coffee, and bananas, rye, barley, oats, and potatoes usually give good yields. Experiments have shown that most European cereals, vegetables, fruits, and flowers may be grown.³¹ As a practical matter, however, there have been crop failures at different times for one reason or another, and such factors as the heavy rainfall and mists make the growing of wheat, for example, hazardous. Counterbalancing these difficulties is the fact that the climate is so equable that two harvests a year of many crops are possible.

As Jean Jules Linden, the great Belgian botanist, stated after a visit to the site of the proposed colony in March 1842, the climate was certainly much more suitable for European settlement than that of most of the tropical zones of South America. Linden left La Victoria on March 11, 1842 and traveled over the new road (trail would perhaps be more accurate) which Codazzi had constructed. He was met by Díaz, who was directing the clearing of the forest. After making botanical investigations, Linden returned to Caracas, much impressed by the possibilities of the site.³²

While Díaz was occupied at Colonia Tovar, Codazzi and Benitz went to Europe to seek colonists. Codazzi reached Paris on June 11, 1842 and was soon engrossed in the activities of the scientific and cultural circles of the city. He was still there when he heard of the change in administration in Venezuela. On January 20, 1843, Páez resigned the Presidency and was succeeded by his Secretary of War, Carlos Soublette. However, Codazzi was convinced that the new President would continue to support the colonization plan.³³ Meanwhile, Benitz was in Baden looking for

²⁶ Alfredo Jahn, "Documentos para la historia de la Colonia Tovar; Vías de comunicación de la Colonia Tovar," *Boletín de la Sociedad Venezolana de Ciencias Naturales*, 5(38):210-211 (December 1938-January 1939).

²⁷ Codazzi, "Prospecto de la empresa de la Colonia Tovar . . .," 68.

²⁸ August Fendler, "Meteorology of Colonia Tovar, Venezuela," Smithsonian Institution, *Annual Report*, 1857, p. 217, 264-279; Venezuela, *Anuario estadístico de Venezuela*, 1940, p. 10; Jahn, "Documentos para la historia de la Colonia Tovar; Vías de comunicación de la Colonia Tovar," 211.

²⁹ *Ibid.*

³⁰ Venezuela, *Anuario estadístico de Venezuela*, 1940, p. 6-8; H. Pittier, "Contribuciones al estudio de la climatología de Venezuela; observaciones pluviométricas practicadas en cincuenta estaciones entre 1891 y 1933," *Boletín de la Sociedad Venezolana de Ciencias Naturales*, 3(24):182 (February-March 1935).

³¹ Jahn, "Documentos para la historia de la Colonia Tovar; Vías de comunicación de la Colonia Tovar," 211.

³² Jean Jules Linden, "Viaje a Venezuela, en las provincias de Caracas, de Carabobo, de Barquisimeto, de Trujillo, y de Mérida," translated and edited by Eduardo Röhl, *Boletín de la Sociedad Venezolana de Ciencias Naturales*, 4(34):407-414 (May-June 1938).

³³ Schumacher, *Südamerikanische Studien*, 321-322.

settlers. His efforts were well received in the villages of Herbolzheim, Eendingen, Forchheim, and Wyhl, and a considerable group of Catholic farmers and artisans agreed to leave for Venezuela. Accompanied by Codazzi and Benitz, they set sail for Venezuela on the French bark *Clementine*. The original schedule had apparently been changed so that the immigrants were to land at La Guaira. However, smallpox broke out on the boat, and plans had to be changed again, so the settlers were finally landed at the little port of Choroni on April 6, 1843. The total number of immigrants was 374, according to the annual report made by the Secretary of the Interior and Justice in 1844.³⁴

The new arrivals had to make the trip to the site of the colony on foot, a difficult undertaking in the unsettled mountainous country. Their clothing was unsuited to the climate; the lassitude brought on by the heat led to overindulgence in strong alcoholic drinks; the sand fleas were troublesome; the local foods such as bananas, yuccas, bean paste, and dried meat were strange and repugnant; and the local water brought on attacks of dysentery.

The colonists were sadly disappointed with their first glimpse of Colonia Tovar. Only a small area had been cleared, and a few huts had been erected. Some work still remained to be done on the trail from the colony to La Victoria, whence came all supplies. However, the colonists themselves went to work, planted the little land that was cleared, aided in finishing the trail to La Victoria, and replaced the crude huts with well-constructed houses in the style of the South German homes they had left. They also built a church, a school, and a town hall.³⁵

A commission of the Venezuelan Government, composed of José María Sosa, Fernando M. García, and Francisco J. Madriz, visited the colony in August 1843. The commission was agreeably surprised by the progress that had been made and in its report spoke favorably of the location of the settlement, its leader, and its inhabitants.³⁶

The colonists, however, were still faced with

³⁴ González Guinán, *Historia contemporánea*, 3:412. Schumacher gave the total as 358, made up of 145 men, 96 women, and 117 children under 14 years of age.

³⁵ Schumacher, *Südamerikanische Studien*, 322-323; Jahn, "Documentos para la historia de la Colonia Tovar; Vías de comunicacion de la Colonia Tovar," 191-192.

³⁶ González Guinán, *Historia contemporánea*, 3:392-394.

many problems, among which the clearing of additional land and the opening of better roads were most pressing. The immigrants themselves were unable to undertake the clearing of the forest, so in October and November 1843, about 120 native laborers and wood-cutters were employed to do the work. While many of these workers ran away from their jobs, some progress was made.³⁷ Codazzi and Benitz had made surveys of a possible route from Colonia Tovar to Caracas, and, on October 8, 1843, a celebration was held to commemorate the commencement of work on the new trail. Progress was slow; the colonists were busy with farm work and the Government felt itself unable to assign more laborers to the project.³⁸ It was not until two or three years later that the trail was easily passable, and then only for pack animals.

The colonists met with more difficulties in the agricultural development of the lands than they might have expected from the prospectus. Codazzi had brought cattle into the colony from the lowlands, but they did not adjust readily to the high altitude; their milk dried up and some died. Thereafter, cattle were brought in by stages and were kept at one altitude for a time before going on to the next. The first harvest took place in September 1843. Some of the first plantings of corn and kidney beans had been lost through the cold and dampness and the total area of land planted had been small. Nevertheless, the return in terms of seed planted was high and the colonists were much encouraged. In May 1844, the land was burned over, and new crops were sown in the ashes. One week was spent sowing the lands of the entrepreneurs, followed by two weeks on those of the colonists. The crops came up and seemed to promise a successful harvest; then mildew attacked the young plants. Heavy rainfalls followed and the potatoes and beans were lost. In fact, the only crop to survive was the barley. The colonists had pinned their hopes on it when suddenly the fields were attacked by caterpillars. Men, women, and children worked to destroy them but without visible success until a strong pelting rain came to their aid and killed the pests. Some of the barley was saved and was the mainstay of the colonists. They used it for bread,

³⁷ Schumacher, *Südamerikanische Studien*, 323.

³⁸ Jahn, "Documentos para la historia de la Colonia Tovar; Vías de comunicacion de la Colonia Tovar," 195-196.

soup, and cattle feed.³⁹ As land was cleared, two other pests, a root-eating earthworm and a slug, proved very troublesome. However, the colonists found that these could be destroyed by careful cleaning and burning of the earth.⁴⁰

By the end of 1844, Colonia Tovar presented a pleasing picture. Paintings by Ferdinand Bellerman, who visited the colony in that year, depict a small village in the architectural style of South Germany, surrounded by forest-clad mountains.⁴¹ There were 120 buildings, including brick houses, two brick kilns, a grain mill, a saw mill, two general merchandise stores, a printing works, an inn with a dance hall, a large warehouse, a schoolhouse for 80 children, and a church with a clock, bell, and ornamental equipment—things unknown in a country town of the tropics.⁴² The printing works, owned by Alfredo Thiberge, even began the publication of a periodical entitled *Boletín de la Colonia Tovar* (*Zeitschrift von der Colonie Tovar*). The first issue appeared in August 1843, but altogether only five numbers were published, the last in January 1845.

Benitz wrote at this time that the colonists were already selling some of their products in Caracas, La Guaira, and La Victoria. The common artisans, such as cabinetmakers, smiths, and turners, were fully occupied in the village itself. The skilled artisans were finding great demands for their services in such work as setting up various types of mills in the Antuagua and Aragua valleys. All the colonists had cattle and other useful domestic animals, and some of the more prosperous had saddle horses.⁴³

Nevertheless, some of the colonists were discontented and perhaps with good reason. Not everyone can adapt himself to life in a new land, with a different type of climate and different problems to be met in making a living, almost cut off from the rest of the world and surrounded by people, if he once gets outside the colony, that are

entirely different in language and customs. It is also possible that the colonists were given misleading impressions by the agents who recruited them for the project and, as has been noted, the prospectus emphasized only the best features of the land. On the other hand, some of the people in the group were probably troublesome and lazy, for it would be almost impossible to recruit such a large group of emigrants without getting some misfits. Whatever the reasons, several individuals had left the colony by the end of 1843. During the next two years, controversy continued, several more persons departed, and some were expelled.⁴⁴ According to an account by a German traveler who talked to the old settlers some thirty years later, some of the colonists who tried to leave were brought back by force.⁴⁵ The crisis in the community reached its height in 1845 and 1846; thereafter, internal dissension was at a minimum. It would appear that during this period also, the colonists were relieved of the obligation to work on the proprietors' lands.

Meanwhile, events were taking place outside Colonia Tovar that were to have a considerable effect on the settlement. Martin Tovar Ponte, the guarantor of the project, died on November 26, 1843. Codazzi regarded this as a turning point in his own life, for, by Tovar's death, the colony lost an ardent supporter at a time when political conditions in Venezuela were undergoing important changes. In 1845, President Soublette called Codazzi to Caracas and asked him to take the governorship of the province of Barinas, a key spot in the revolutionary struggle then going on. Codazzi turned the direction of the colony over to Benitz and left for Barinas in December 1845. He returned for a short time in March 1847 when it seemed that the colony was again endangered from internal dissension and outside political pressure. He again aroused great hopes of Colonia Tovar's prospects and pointed out that the cultivation of coffee, ideally suited to the valley, would give the colonists a marketable cash crop. However, the successful revolt against Páez and Soublette forced Codazzi to leave Venezuela in 1848 for Colombia where he remained until his death in 1859.⁴⁶

³⁹ *Ibid.*, 324-326; Blume, "Die Verhältnisse von Venezuela," 123-124.

⁴⁰ P. J., "Eine deutsche Kolonie in Venezuela," 355.

⁴¹ Schumacher, *Südamerikanische Studien*, 325-329; Jahn, "Documentos para la historia de la Colonia Tovar; Vías de comunicación de la Colonia Tovar," 199.

³⁹ Schumacher, *Südamerikanische Studien*, 324; Musieu, "La colonización en Venezuela," *Cultura Venezolana*, 36(89): 245-246 (September 1928).

⁴⁰ Blume, "Die Verhältnisse von Venezuela und die dortige deutsche Colonie Tovar nach neueren handschriftlichen Mittheilungen und eigener Erfahrung," *Gesellschaft für Erdkunde zu Berlin, Monatsberichte über die Verhandlungen* (n. s.), 10:122-123 (1853).

⁴¹ Reproductions of some of the paintings appear in the various articles previously cited in the *Boletín de la Sociedad Venezolana de Ciencias Naturales*.

⁴² Schumacher, *Südamerikanische Studien*, 324-325.

⁴³ *Ibid.*, 325.

Benitz continued in charge of the colony. By 1846, its population had decreased to 331 persons. According to the annual report of the Secretary of Interior and Justice for 1846, Colonia Tovar was making some progress. However, the harvests had not been very remunerative, so some of the settlers had hunted work outside the colony.⁴⁷ Three years later, in 1849, Colonia Tovar had a total population of 367, made up of 201 males and 166 females.⁴⁸ This would indicate that the settlement had been relatively stable for three years. The figure for the next year, 374 persons, also indicates little change.⁴⁹ In 1851, the settlement had 371 persons. The Secretary of Interior and Justice reported that conditions in the colony, which was still under the care of Benitz, were satisfactory. The colonists cultivated mainly minor crops. They had tried to raise wheat without success, and the coffee trees had been attacked by a plague. Barley, rye, and vegetables gave good yields and most of the colonists owned domestic animals.⁵⁰

In this period, Louis Glocker, Venezuelan Consul at Hamburg, was attempting to secure German emigrants for Venezuela. To this end he issued some pamphlet material, part of it relating to Colonia Tovar. In June 1851, Glocker released two accounts of Colonia Tovar, one by Manuel de Tovar, Martin Tovar y Galindo, Bartolome Palacios, and Juan Jacinto Rivas, and the other by Ramón Díaz. The first account stated that the road to La Victoria from Colonia Tovar was in good condition, that one to Caracas had been opened by the colonists but was not quite complete, and that a new one was now planned to the port of Maya. The colonists were self-sustaining and prosperous. They cultivated barley, oats, rye, various types of legumes, potatoes, and similar crops. Enough of each crop was stored to meet the needs of the colonists, and the surplus was sold in Caracas, La Guaira, La Victoria, and other towns. There were several artisans in the colony who found employment both there and in surrounding areas. The colonists had set up a water mill for preparing meal, a sawmill, and a brewery. Each family had milch cows, swine, and poultry;

most of them had pack animals. On the cultural side, Colonia Tovar supported a primary school under the direction of a German teacher, and a botanical garden had been started by a naturalist named Moritz.⁵¹

The account by Díaz was similar in tone and content. He added that the climate was so healthy there had been almost no sickness in Colonia Tovar for seven years and that it would be to the mutual advantage of the colonists and immigrants if up to 5,000 additional Germans would settle there. Glocker added the observation that, although Colonia Tovar had made great progress, it had not lived up to expectations. It is obvious, as a commentator on these accounts pointed out, that it was to Venezuela's advantage to describe the colony in glowing terms. Further, the Tovar family, two members of which signed the first of the statements, still owned land in the area, and it would have been profitable for them to have the country opened up, with towns and good roads built contiguous to their property.⁵²

At any rate, Glocker was successful in getting some Germans to migrate to Venezuela. In 1851, eighteen families totaling 103 persons made the journey, and in 1852 a total of 605 persons followed.⁵³ It would appear that some of these people settled in Colonia Tovar, for they were the only immigrants to enter Venezuela in this period, and the population of the settlement jumped to 461 persons in 1852 and to 504 in 1855, in spite of the fact that 50 left in 1852 to found a new settlement in the Tacasuruma Valley.⁵⁴ In 1853, an account in a German periodical detailed the disadvantages under which the colony had labored at first, but it was optimistic about the present and future. According to the author, the land had to be kept up by fertilizing, but it would give a yield similar to that expected from good land in Germany. The climate was too damp for wheat and even barley and potatoes would sometimes be attacked by mildew. Likewise, the climate was too cool for cacao, indigo, sugar, and cotton, but it was very well suited to coffee. Potatoes, rye, oats, barley, vegetables, and some fruits, among them peaches, apples, strawberries, and raspberries, usually yielded well. Most of the land be-

⁴⁷ González Guinán, *Historia contemporánea*, 4:291 (Caracas, 1910).

⁴⁸ Manuel Landaeta Rosales, *Gran recopilación geográfica, estadística e histórica de Venezuela*, 1:145 (Caracas, 1889).

⁴⁹ González Guinán, *Historia contemporánea*, 5:155 (Caracas, 1910).

⁵⁰ *Ibid.*, 211.

⁵¹ P. J., "Eine deutsche Kolonie in Venezuela," 355-356.

⁵² *Ibid.*

⁵³ González Guinán, *Historia contemporánea*, 5:189-190, 275.

⁵⁴ *Ibid.*, 275; Landaeta Rosales, *Gran recopilación*, 1:145.

longing to the colony was still covered with primeval forest. The author concluded from his survey that the future prospects of the colony were favorable and that Venezuela offered a great field for German immigrants.⁵⁵

August Fendler, a botanist who lived in Colonia Tovar for over four years, reported to the Smithsonian Institution in 1856 that the climate was characterized by its clouded sky, its equable temperature, and its great amount of moisture. He mentioned potatoes, rye, and oats as the most profitable crops. Fendler also stated that, although the trees were always green and there were no distinct seasons as in the temperate zone, the humus-covered forest floor was susceptible to fire in periods of unusual dryness and that such fires caused erosion and a rapid run-off of the surface water, entirely changing the type of vegetation that could be supported.⁵⁶

Ten years later, in 1866, a German traveler published a superficial account of the colony in which he pictured it as rather prosperous. The fields were surrounded with blackberry bushes; Swabian farm boys in blue caps and short trousers were seen on the roads. The inhabitants had retained their German habits, dress, and speech, only slightly modified by Venezuelan influences.⁵⁷ Meanwhile, Venezuela had been undergoing a series of civil wars. During the years 1866 to 1870, Colonia Tovar was greatly affected by them. Its isolation and stores of food attracted marauding groups from both sides, and it was plundered again and again. Too, a few of the colonists sided with one or another faction in the war. By 1870, many of the inhabitants had left the settlement.⁵⁸

However, conditions took a turn for the better after Antonio Guzman Blanco assumed control of the Venezuelan Government in 1870, a control which he retained for eighteen years. A thorough account of the colony as it was in 1874, published in Berlin in 1881 by a German traveler, although pessimistic as to its future, indicated that it had again reached a certain stability. He described

the road from Caracas as passable by horses and pack animals most of the time, although dangerous and difficult. The village itself made a pleasant impression from a distance, the houses lying scattered in a basin-like valley between green fields. Closer examination revealed, however, that the church needed repairs and that most of the dwellings were little more than huts. The inhabitants were estimated at 200 persons or 40 families. At that time, the number did not seem likely to grow, even by natural increase, for as soon as a young man learned a trade he left the colony for places where his services were more in demand and better paid. Many of the older colonists envied those who were able to leave, even though they themselves were able to make a living in the settlement.

Agriculture was generally on a self-sufficing basis, that is, the colonists consumed what they grew, which was sufficient for their needs. Rye gave good yields and was ground into meal, but the surplus could not be sold because of the high transportation costs. Potatoes and vegetables were sent to market to pay for the few necessary imports. As to the soil itself, erosion was making some inroads. It was impossible to clear new land as the Venezuelan Government had forbidden the burning off of forests. The colonists had sawmills, but here again transportation costs made the sale of lumber difficult. The brewery had long since been forgotten. Earlier accounts of the colony had spoken of its cattle, but this traveler saw few; he could not obtain milk or butter and ate cheese brought in from La Victoria. However, the colonists had sufficient work animals. Moritz, the botanist, had died a few years previously, and his gardens had been without care since that time. The school was kept by an old lady because the villagers could not afford to pay a qualified teacher.

What were the causes for this stagnation? The author of the account believed that the attempt to grow grain and vegetable crops instead of coffee was the deciding factor. Coffee was so valuable that it could carry the high cost of transportation, and the climate was ideal for its production. The colonists did not undertake the work because the older people did not have the energy and perseverance to undertake any new job, and the energetic young people left Colonia Tovar as soon as they could. In addition, the experiences of the revolution just past and the possibility of

⁵⁵ Blume, "Die Verhältnisse von Venezuela," 122-125.

⁵⁶ Fendler, "Meteorology of Colonia Tovar, Venezuela," 181, 187-188.

⁵⁷ Wilhelm Kiesselbach, "Von Bremen nach Caraccas und der deutschen Niederlassung Tovar in Venezuela," *Globus*, 9:279 (1866).

⁵⁸ Wilhelm Sievers, *Venezuela*, 278 (Hamburg, 1888); P. J., "Eine deutsche Kolonie in Venezuela," 370.

future wars were not conducive to the inauguration of new enterprises.⁵⁹

Nevertheless, the settlers began to establish coffee plantations about 1880 and went at the problems they met with considerable enthusiasm and tenacity. As the territory of Colonia Tovar itself was slightly too high to get the best results, the colonists bought or contracted for lands in somewhat lower neighboring areas. Once the cultivation of coffee had been established, its high price made the settlement more prosperous than it had ever been.⁶⁰

In 1881, Colonia Tovar had 236 inhabitants.⁶¹ Ten years later, the population was 319. In 1914, three of the original immigrants were still alive, and one of them, ninety-year-old William Ruh, was the head of the community. World War I tended to draw the inhabitants closer together in a consciousness of their national origin, and funds were collected for the German Red Cross and for opening a school to be taught by a German schoolmaster.⁶²

A Venezuelan who visited Colonia Tovar in December 1922 was much impressed by the blond Germanic appearance of the inhabitants. They had, ever since 1843, married among themselves or with the few German families who had entered the colony in later times. Any person who married a native Venezuelan had to leave the colony. As each child came of age, he or she was given about 5 acres of land, so that a newly-married couple had about 10 acres for cultivation. The neighbors helped them put up a house, and the parents gave them some domestic animals and poultry. Many of the colonists raised coffee which was sent by muleback to be sold by German firms in Caracas. The inhabitants, numbering about 750, carefully abstained from mixing in Venezuelan affairs; the Government, for its part, granted them practically complete independence. Because Venezuela had no land tax, there was no problem on this score, and the colonists were not called upon for military service. There was little

crime and neither jails nor police. The colonists spoke a German dialect which could hardly be understood by outsiders. There was no appearance of physical degeneration in the colonists, and sickness was rare. However, in most respects, life was on the level of or inferior to that of German peasants a century earlier. The women worked hard from dawn until dark in the fields and in the home. The dwellings and clothing were generally dirty, and the food was hardly better than that of the Venezuelan peons. Most of the houses had dark damp interiors, usually with no fireplaces or other means of heating them, although firewood was abundant and the nights were often cold.⁶³

The colony's comparative prosperity, brought about by coffee cultivation, and the interest of a well-known Venezuelan scientist, Alfredo Jahn, caused the Venezuelan Government to give some attention to the long-neglected project of a wagon road from Caracas or La Victoria. In May 1924, the Ministry of Public Works designated an engineer to survey possible routes; his report was published in the next year. According to Jahn, the estimates of cost were much too low, and nothing came of the report. Jahn, who owned several estates in the area, made extensive surveys of possible wagon roads. Late in 1935, after President Gómez had died, the new administration asked Jahn to supervise the construction of a road from Caracas to Colonia Tovar and put 1,300 laborers under his direction. Work was begun but the number of laborers assigned to the project was steadily reduced. The project was stopped in 1937 when the road had reached El Junquito, 14 miles from Caracas and 23 miles from Colonia Tovar. Jahn attributed the suspension of the work to the influence of the town of La Victoria, which would be bypassed when the road was completed. At present, much of the trade of Colonia Tovar is with or via La Victoria, 47 miles from Caracas by an all-weather road and 22 miles from Colonia Tovar. About one-half of the road from La Victoria can be traversed by wagons and high-slung automobiles in good weather.⁶⁴

While collecting birds, mammals, and reptiles, three scientists of the American Museum of Natural History made Colonia Tovar their headquarters for a week in November 1937. One of the group,

⁵⁹ *Ibid.*, 369-370.

⁶⁰ Jahn, "Documentos para la historia de la Colonia Tovar; Vías de comunicación de la Colonia Tovar," 200-201.

⁶¹ Landaeta Rosales, *Gran recopilación*, 1:83.

⁶² Otto Bürger, *Venezuela; ein Führer durch das Land und seine Wirtschaft*, 257 (Leipzig, 1922); [Otto Bürger], "Vom Deutschtum in Venezuela," *Das Echo mit Beiblatt Deutsche Export-Revue* [Berlin], 41:1834 (May 4, 1922).

⁶³ Musieu, "La colonización en Venezuela," 246-248.

⁶⁴ Jahn, "Documentos para la historia de la Colonia Tovar; Vías de comunicación de la Colonia Tovar," 201-202, 204-205, 208-209.

Thomas Gilliard, published a short account of the colony and illustrated it with several interesting photographs. Gilliard was struck by the blondness of the people, which indicated that they had adhered closely to their policy of not mixing with other Venezuelans. He was also impressed by their policy of isolation and self-sufficiency, in which outside forces, particularly poor transportation, obviously were factors. The houses were still built with half-timbered façades in the style of old Germany. Instead of plaster between the timbers, the inhabitants used adobe, and some of the buildings were roofed with galvanized iron. The tall poplars characteristic of South German villages stood out above the dwellings. The colony maintained a school, and the storekeeper had a radio and a home lighting plant. A telegraph system had been put in at one time, but had been wrecked. The residents were still discussing the road that the Government might build someday.⁶⁵

An account of Colonia Tovar published in a popular Caracas magazine in 1942 emphasized the isolation of the settlement and showed by illustrations that the original blond type still persisted. The village was described as a remote peaceful place, ideal for a vacation, and the quality of the water-ground meal was extolled. The comparative failure of the original plan for a prosperous growing settlement was laid to the indifference and negligence of the Government.⁶⁶

Certainly, the Government had neglected the colony, although it had subsidized it in its first years, and the only instance where the negligence had noticeably bad effects was in the failure to put through a wagon road. Lack of transportation has been a most discouraging factor throughout the hundred years since the settlement was

established. On the other hand, it might be argued that, had all other conditions been ideal, the colonists themselves would have constructed the road. Another basic factor militated against progress—the lack of stability in the Venezuelan Government. Immigrants preferred other countries because the Venezuelan Government was notoriously subject to revolution, and they could never be sure that their property and rights would be safeguarded in the midst of recurrent civil wars and changing administrations. The experience of Colonia Tovar in such matters, particularly in the period from 1866 to 1870, only added to the general impression abroad that the political situation was unfavorable to settlers. Additional immigrants did not enter the colony, and those already there were not forceful enough to push through a road and perhaps were content to remain partially isolated from the troubles of the rest of the country.

The policy of social and cultural isolation was not particularly harmful to the colony, but it might have carried dangerous implications for the Nation. Geographic concentration of alien peoples in any country, particularly one still underpopulated, may lead to such troubles as separatist movements, racial factionalism, and intervention by the motherland. At least, it hinders the development of an integrated nationality. Colonia Tovar remained small and undeveloped, and most of these problems did not arise, but had the colony grown powerful and remained race conscious, the implications are obvious. As it was, neither the colony as a whole nor the individuals who left it for other parts of the Nation played important roles in Venezuelan political life.

Colonia Tovar stands today as a reminder to Venezuela that it would not be advantageous to have the Nation's unused land settled by isolated frontiersmen on a subsistence level or by nationalistic groups. Social and economic integration are essential.

⁶⁵ Thomas Gilliard, "A 'Lost' German Colony," *Natural History*, 44:9-12 (June 1939).

⁶⁶ F. V., "Municipio Tovar del Distrito Ricaurte del Estado Aragua," *Elite* (Caracas), 17(855):14-18 (Feb. 21, 1942).

THE FARMERS' MUSEUM

THE MUSEUM OF THE NEW YORK HISTORICAL ASSOCIATION AT COOPERSTOWN

CLIFFORD LORD¹

Some people say that history makes friends slowly. In any field, whether it be social, political, religious, or economic; American, European, or Asiatic; industrial, business, or agricultural, they hold it a subject which is likely to appeal only to the few. It takes time, they argue plausibly, to appreciate history because it takes time to get to know history. Years are required to get truly interested in history, years to appreciate its values and the things it has to offer.

There is a certain amount of truth in this line of thinking. The more history a person knows, the more he wants to know. History is like old wine. It mellows with the years, acquiring finer flavor and new interest for him who would possess it. It also grows on those who quaff its heady nectar. Yet history is too important to be left for the "chosen few." What it can mean in terms of perspective and greater common sense in citizenship, national and international, is too vital to be allowed to bypass the bulk of mankind. A people without a consciousness of its history may be said to be in a state of national amnesia. The study of our Nation's history inevitably warms our appreciation of the greatness of our heritage and equips us more fully for the tasks which confront each successive generation. If, therefore, we accept it as a necessary task, or, better still, as a challenge, to bring our history in a greater degree into the public consciousness, we must then concern ourselves with the methods to be used in presenting the subject to a growing audience.

Compulsory study, without unusually gifted teachers, is often tragic in its results. How many students has the college teacher seen with an apathy, or strong dislike, towards American history, attitudes well developed by required courses in grammar and high schools! Popularizers who make life too simple, too dramatic, through their patent superficiality often lose converts

almost before they make them. The movies have magnificent potentialities in animated cartoons and maps, and in well-acted, accurate historical films. Unhappily, too often they have sacrificed truth to the exigencies of the boy-meets-girl formula and to the shibboleth that almost all movies must have at least an element of the happy ending. Movies used in a continued course of study have great possibilities. Seen once every few months as one part of a double feature, they can hardly offer much continuity or do more than pique the fleeting interest of a few skeptics who want to know a little more, for example, about what kind of woman Queen Christina really was. Adult education also has great possibilities, if the leaders are good teachers or know what readings to assign. Unfortunately, most adults have neither the time nor inclination to participate in such courses. A brilliant lecturer or a well-written article or monograph may indeed fire the interest of the novice, but few go to hear lectures and fewer still read historical monographs.

There is another vehicle of instruction, a very different medium, whose possibilities are exciting and whose potentialities have hardly been touched—the modern museum.

A hackneyed phrase has it that seeing is believing—which perhaps is not as true today as it once may have been. Yet visual education is just in its infancy. Its possibilities are enormous as progressive museums throughout the country are coming to appreciate. The art museum, the natural history museum, and the historical museum can give at least elementary instruction more effectively, I believe, than can any other teacher, because they have the physical evidence immediately at hand, where it may be seen, studied, and, in many cases, felt and handled. They can tell the story simply and effectively. Because they can illustrate with objects, in themselves having an immediate interest to the viewer, they make their points more quickly. An array of physical objects, many of them having special historical interest over and above their place in the sequence of an exhibit, tells, with the aid of

¹ The author is director of the New York State Historical Association which will operate the Farmers' Museum. For a complementary article on the same subject, see Clifford Lord, "The Farmers' Museum," *New York History*, January 1943.

concise explanatory labels, a story it might take a book or a lecturer hours to explain.

It is difficult to overstate the value of physical objects in educational exhibits. The harassed father falls back on the bees and the flowers to illustrate his point. It is easier to learn about arrowheads by seeing them while their use and manufacture is discussed than it is to learn about them just by reading, for the same reason, though in greater degree, that books often supplement their explanations with illustrations in the text.

Museums, as a whole, are certainly not likely to be as thorough instructors as the professor in a graduate school, or as a series of able monographs. No one knows everything there is to know about the dinosaur after an afternoon in the Museum of Natural History in New York, though this institution has the facilities to teach him if he *studies* there for a few years. No one becomes an authority on astronomy after an hour, fascinating as it may be, in the Hayden or the Adler planetariums, though again the facilities are there. However, for the novice, for the freshman, an introduction has been made. He has learned more in a shorter length of time by simultaneous use of ear and eye than he could have from the ablest lecturer through ear alone, or the ablest author through eye alone. The museum makes its impact through both senses.

It is with full faith, first of all, in the museum as a vehicle of effective popular instruction, that we are launching at Cooperstown, New York, the Farmers' Museum. By its very title, this or any other farmers' museum is not and cannot be just an agricultural museum. As Professor Arthur M. Schlesinger, in his presidential address to the American Historical Association, said of the American farmer's life one to three centuries ago:

Besides wrestling with the soil, every husbandman was a manufacturer and every home a factory, engaged in grinding grain, making soap and candles, preparing the family meat supply, tanning skins, fabricating nails, harness, hats, shoes, and rugs, contriving tools, churns, casks, beds, chairs, and tables. Occasionally he did some of these things for his neighbors for hire. Such activities were supplemented by hunting, trapping, and fishing. As cold weather closed in, the men used their spare time in getting out rough timber products, such as shingles and planks, or spent the long winter evenings before the open fireplace carving gunstocks or making brooms while the womenfolk knitted, spun, or wove.²

A farmers' museum therefore must be partly an agricultural museum and partly a museum of the old household handicrafts. It must include, besides the implements of the farmer himself, the tools of the kitchen and the equipment for making cheese, butter, soap, and candles. The tools of cooper, cobbler, carpenter, blacksmith, tinsmith, pewtersmith, hatter, glovemaker, wheelwright, saddler, and glass blower must also have their place. When these crafts are combined with the farming, a substantial portion of the history of the country is involved.

The Farmers' Museum is therefore being undertaken, in the second place, in full faith that the history of our people is a story worth telling. This history is not apparent, in its most deeply significant phases, merely from the inspiring documents of our increasingly egalitarian democracy, from the details of our economic or political progress, or from the available generalizations about American culture and education. These things are bereft of true meaning unless accompanied by an intimate study of the life of the common man—the artisan, the farmer, the men and women whose “blood, sweat and tears,” whose trials and humiliations have built the nation we know today.

In speaking glibly of conquering the wilderness or pushing westward the path of empire, we are apt to forget what lies behind such words: the toil of the wooden or the iron-sheathed plow, the sweat and aching muscles of the saw pit, the back-breaking labor of the itinerant cobbler, the tedious processes of the tannery, the relatively slow production of the barn-frame loom, and the ceaseless wear from men's hands which has hallowed the handles of many implements with a polish whose essential quality is impossible to imitate. Hurried and thoughtless references make it equally hard to realize the painstaking care with which the craftsman produced his wares, the extraordinary skill which the tight cooper had to develop for his keelers, canteens, and firkins, the interminable processes of making linen thread and weaving it into cloth, coverlet, or carpet, and the exasperating task of boring 15-foot wooden water pipes. Lack of the pause for reflection makes it all too easy to overlook the ingenuity which adapted the broken scythe to a corn sickle, which converted the farm's scrap iron into a covering for the primitive plow, and which constantly improved on existing implements.

It is to recall the detail of the life of the artisan, the craftsman, and the farmer of what Jared van

² *American Historical Review*, 48:230 (January 1943).

Wagenen has aptly called the "golden age of homespun";³ to reestablish contact between the present generation and their forebears, lineal or spiritual; to revitalize something of the spirit of the men and women of a century and more ago, who pushed the frontier westward, brought the land under cultivation, built canals and railroads, and secured an all but universal manhood suffrage and free public schools, that we are establishing the Farmers' Museum at Cooperstown. We know the fruits of these men. We can better appreciate the people themselves by knowing the tools with which they tilled their fields and earned their bread. Knowing them, we may the better know ourselves.

Perhaps this is sufficient to indicate what the sponsors of this project have in mind, yet because the purpose of the Farmers' Museum is somewhat different from that of most similar collections, it may be well to expand the point further.

Many people and many museums collect "antiques," by which they mean the several products of our early craftsmen: furniture, pottery, glass, pewter, silver, and similar objects. These items are collected primarily for their aesthetic value, and they are what we may, for our purposes, call consumers' goods. This is not the place to argue the relative importance of producer and consumer. Nor should the economists among us be too disgruntled over the slight perversion of terms which follows. The point is that most historical museum collections are devoted to these "consumers' goods," to the *products* of the artisan. The Farmers' Museum, on the other hand, is devoted to "producers' goods," to the *implements* of the worker. The sponsors of this museum are convinced that a better picture of American life, and that of the farm and shop, can be had from the tools and implements of the common man than from the most elaborate furniture, the best art, or the finest luxury goods with which the wealthy landowner or merchant of an earlier day was privileged to adorn his home. They believe that such a picture is useful in a democracy in order to produce a truer appreciation and a healthier respect for the dignity and accomplishments of those who practiced crafts and agriculture—a happy result which a real exposure to such tools almost inevitably brings. This is in no way meant to disparage the

collection of products. Rather the Farmers' Museum, in taking the producer for its central theme, is working in a field which has been largely neglected and the potentialities of which have seemingly been grossly underestimated.

It is not only the deeper appreciation of the fundamentals of our history, of the dignity of past labor, of the hard work of the pioneer, and of the skill of the craftsman, that lend importance to the tools of the early plowman or turner. There are other valid reasons for the establishment of such a collection. Many lovers of antiques get their greatest pleasure from the appreciation of the functional rather than the aesthetic beauty of an object. They enjoy the craftsman's product as an object primarily utilitarian, and only incidentally decorative. Yet no product of the craftsman is more functional than the tools by which it was made; no object is more strictly utilitarian than the implements which gave it birth. He who has once seen the perfection of form in a fine butter mold, the delicately shaped handle some blacksmith gave his carefully forged ladle, the heavy strength yet graceful lines of the anvil, or the whittled base of a wooden apple parer, at once appreciates the fact that some craftsmen enjoyed the same decorative utilitarianism in tools, primary and secondary, that others demanded in their luxury products. The Farmers' Museum is more concerned with the tools and implements behind the product than with the product itself because it feels that the study of these happy combinations of usefulness and loveliness must sharpen the mind and stimulate the imagination.

Still other collectors of these antiques are concerned—to their intellectual enrichment—with the social and economic history manifest in the adaptation of European implements and tools to the conditions of a new world and of a frontier society. The evolution of the English ax into the trade ax, the tomahawk, the broad ax, the hewing ax, and other variations in the land of the Indian and plentiful wood; the changes in the augur; and the development of carding are all full of historical interest. They not only help us get a new grasp on the basic facts of our country's or our region's history—but they are inevitably provocative to the imagination and inventiveness of anyone with the slightest mechanical aptitude. The painstaking care of the true craftsman, his penchant for utilitarian beauty and his insistence on doing things right are attributes that Americans can ill afford to lose. No more can they sensibly over-

³ Jared van Wagenen, Jr., "The Golden Age of Homespun," New York State Department of Agriculture and Markets, *Bulletin* 203 (Albany, 1927).

look the unpleasant fact, to some, of hard work, by dint of which the early artisan and early farmer alike laid the foundations of relative prosperity and increased standards of living for the days and generations which lay ahead.

There is genuine inspiration lurking in these symbols of the living past—inspiration from the closer contact they afford with the very meat of our history; inspiration from the advances, the adaptations, the evolutions and the revolutions in devices, from the gadgets and the space- and labor-saving contrivances which have been characteristic of American genius from very early days. On both scores such inspiration, sorely needed in any land in every generation, makes such a collection potentially a valuable contribution to our educational and patriotic facilities. It is the job of this museum to make that inspiration pointed and accessible.

Now a word as to the plant of the Farmers' Museum. Just north of the village limits of Cooperstown, on the west shore of Otsego Lake, lie the rolling lands of Fenimore Farm. They are by no means devoid of historic interest themselves, for part of the property once belonged to James Fenimore Cooper. Part belonged to Elihu Phinney, the famous old printer who brought his press to Cooperstown in 1795 shortly after the village was laid out by William Cooper. Part of it once belonged to Samuel Nelson, for twenty-two years an associate justice of the United States Supreme Court, whose old law office still stands on the property. Both Cooper and Nelson lived for a time in the charming rambling pillared house, since destroyed, and welcomed visitors beneath the lofty shade trees which guard the approaches and stretch on invitingly toward the lake.

Against the colorful backdrop of the Otsego hills, eight substantial farm buildings dot the "campus" overlooking Otsego Lake. The main barn, completed in 1918, is built of native stone, with concrete floor. An enormous building, it measures 225 feet long, 42 feet wide, and 31 feet high on the north-south axis, and 141 feet long, 50 feet wide, and 45 feet high on the east-west axis. On its floors we are now arranging exhibits of the utensils and implements of the Farmers' Museum.

This rich setting, with the huge stone barn, seven other buildings, and 25 acres of land, has been made available by Stephen C. Clark of Cooperstown in memory of his brother, Edward Severin Clark. It is a peculiarly fitting memorial to a man whose life was devoted to scientific agri-

culture and the support of projects for the enrichment of the community, and who was the long-time president and ardent supporter of the Otsego County Agricultural Society, which in 1817 staged the first county fair in New York State, in the presence of Elkanah Watson.

The main building will house the major exhibits. The west wing will be transformed into an auditorium capable of seating about two thousand people, which will be suitable for large agricultural meetings, rural festivals, and square dances. With minor interior alterations, the first floor is being transformed into a series of shops, one for the carpenter, the woodworker, and the turner, one for the cobbler, one for the cooper, one for the spinner and the weaver, one for the tanner and harness and horse-collar maker, one for the smithy, one for the wheelwright and wagon maker, one for the basket maker, one for the glass blower, one for the potter, one for the cider maker, one for the wine maker, one for lumbering and the sap-syrup industry, and so on.

There will be room for the smaller agricultural implements, for hunting, fishing, and outdoor sports equipment, and for exhibits of material on the early county fair. Provision has been made for a huge old-fashioned kitchen, with brick oven and all the equipment of former days. The rustic second floor with its arched roof and open beams will house wagons, sleighs, threshers, and the larger types of early agricultural machinery.

To the south of the main building, and connected with it by a covered stone passageway, is a smaller stone structure, which will house the library on old crafts and farming practices which the New York State Historical Association has been gathering for the Farmers' Museum. Files of agricultural periodicals; records of agricultural societies; publications such as the *Chronicle* of the Early American Industries Association and the *Antiques* magazine; early books on horticulture, fertilizers, machines, and farm techniques; early treatises on dyeing, fulling, glass blowing, the potter's art, and other crafts will be preserved here for reference purposes in connection with the collection. Generous gifts have already made many of these available. The library will be designed alike to service the serious student and researcher and to delight the casual visitor and browser.

In another of the large barns on the property, adjacent to the stone barn which will house the farm and craft relics, will be displays tracing the development of modern agricultural machinery.

A promising beginning has already been made in this field.

An old stone country store built about 1825 will be moved to the Farmers' Museum. Within its walls we hope to recreate the atmosphere of the days when the country store with its cracker barrels was an important medium in the formation of public opinion and the scene of great but unrecorded forensic exertions.

There will be an old school house to commemorate that significant vehicle for the spread and development of the doctrines of liberty, equality, and fraternity and for the increasing realization of those ideals.

There will be a blacksmith shop, full of its stories of yesteryear; a grist mill, its steps and floors hallowed by the tramping of countless feet; a drug store; and a lawyer's office—that of old Judge Nelson, restored as nearly as it can be to its condition in the days when the Justice returned from Washington to his beloved Cooperstown to write his learned decisions in the peace and calm beauty of the shores of Otsego Lake.

Behind the buildings, and included in the lands given to the Museum, is a natural amphitheater in the hills, which it is planned to develop ultimately for outdoor pageants, community use, and perhaps agricultural fairs. Adjacent fields, also part of the property, ensure adequate parking facilities.

The story, then, that we would have the walls of the Farmers' Museum tell is that of the bitter and unrelenting toil which made possible the pursuit of happiness in what was once a wilderness—the story of the blisters, the aching tendons, the broken hearts, which went into the creation of modern America. That is the Museum's first job: to tell again the story of the hard work which these implements portray. We emphatically feel that story worth telling again and again, as often as it can be told.

Then we want to tell the story of man's progress in the last one hundred and fifty years, of how he adapted himself and his tools to new conditions, of how he extemporized and invented to better his lot in life, to save labor, and to create and improve devices and gadgets which would enable him to do more in a given time than he had been able to do before. A basic difference between modern civilization and that of a hundred years ago is the degree to which we have harnessed power to make ma-

chines do our work for us. We want to show the beginnings of this evolution in the early household and on the early farm. No one can stand before an exhibit showing the evolution of the lowly apple parer without sensing the possibilities of the application of mechanical knowledge and aptitudes to everyday problems. No one can view one particular cherry pitter we have without both delight and admiration for the man who achieved such a simple, efficient, and effective device. These exhibits excite the imagination and stimulate latent inventive power. They arouse our creative instincts. The story they tell of perseverance, inventiveness, and ingenuity is both effective and important, and, again we feel, worth telling.

This in brief is the plan of the Farmers' Museum: to tell the story of the artisan and farmer of earlier days; of the common man, generally unsung by the professional historian, yet the man who literally by the sweat of his brow helped make us what we are today. We intend to enshrine the work of that common man, his perseverance in the face of adversity, his conquest of obstacles, and, above all, his ingenuity in saving labor by using his head.

From the foregoing it may be judged that the Farmers' Museum is not just another "antiquarian" venture. Rather it is dedicated to the richer education-in-history of our countrymen. To make it a provocative experience, each exhibit on each craft and each section of farm economy will be arranged with one major consideration in mind: it must tell its own story clearly and interestingly. Each exhibit must show a complete process; it must portray all stages of the particular craft. By labels and by their position in the exhibit, the use of each item must be clear. Even more important, the fine points of each object, the things which distinguish it from its peers, the specific improvement which separates it from its immediate predecessor, must be made evident to the most uninitiated layman. Many exhibits may be animated. Each must be fully self-explanatory to the novice, for imaginations should not be left to run riot until they have mastered the actual processes. Only in this way will the Farmers' Museum fulfill the purpose its designers in all humility have set for it—to tell a magnificent story in an interesting, worthwhile, and instructive way, so that American farm and craft history may make friends—and better Americans—faster.

PEHR KALM'S OBSERVATIONS ON THE NATURAL HISTORY AND CLIMATE OF PENNSYLVANIA

EXCERPTS FROM HIS LETTER OF OCTOBER 14, 1748

ESTHER LOUISE LARSEN

INTRODUCTION

Historical students are generally familiar with Pehr Kalm's famous journal, *En Resa til Norra America* (Stockholm, 1753-1761), which has been translated and variously published in Dutch, English, French, and German, but his articles on American subjects which were printed in the Kongl. Svenska Vetenskaps Academiens *Handlingar* during 1749-1778 are also important, especially for the scientific observations they contain, and deserve translation and scholarly attention.¹

¹The articles in this series which have been translated and published by the present translator are as follows: "Lobelia sasom en säker läkedom emot Veneriska sjukan," from the Kongl. Vetenskaps Academiens *Handlingar*, 11:280-290 (1750), under the title "Lobelia as a Sure Cure for Venereal Disease," in the *American Journal of Syphilis, Gonorrhea, and Venereal Diseases*, 24(1):13-22 (January 1940); "Beskrifning Huru Socker göres uti Norra America af åtskilliga slags trän," from the *Handlingar*, 12:143-159 (1751), under the title, "Peter Kalm's Description of How Sugar Is Made from Various Types of Trees in North America," in *Agricultural History*, 13:149-156 (July 1939); "Beskrifning om Mays, Huru den planteras och skötes i Norra America, samt om denna Sädessartens mångfaldiga nytta," from the *Handlingar*, 12:305-318 (1751), 13:24-43 (1752), under the title, "Pehr Kalm's Description of Maize, How It is Planted and Cultivated in North America, together with the Many Uses of This Crop Plant," in *Agricultural History*, 9:98-117 (April 1935); and "Norr-Americanska svarta Valnöt-trädets egenskaper och nytta," from the *Handlingar*, 28:51-64 (1767), and "Om Hvita Valnötträdets egenskaper och nytta," from the *Handlingar*, 30:119-127 (1769), under the title, "Pehr Kalm's Observations on Black Walnut and Butternut Trees," in *Agricultural History*, 16:149-157 (July 1942). Kalm's octavo pamphlet (Stockholm, 1751) with the heading, "En Kårt Berättelse, om Naturliga stället nyttan, samt skötseln af några växter, utaf hvilka frön nyligen blifwit hembragte från Norra America, til deras tjenst, som hafwa nöje, at i vårt Climat göra försök med de sammans cultiverande" has also been translated and printed under the title "Peter Kalm's Short Account of the Natural Position, Use, and Care of Some

The article which is here translated appeared under the title, "Utdrag utur Herr Professor Kalms bref ifran Philadelphia i America d. 14. Oct. 1748," in the Kongl. Svenska Vetenskaps Academiens, *Handlingar*, 10:70-75 (1749).

KALM'S LETTER

On the twenty-fourth of July, the ship went down from London, and, on the evening of the twenty-fifth, I stepped on board the same at Gravesend. We then went further down the river and out to sea.

A gentle wind, which continued nearly every day, made the trip more than pleasant for us. The storm birds which are described in Kongl. Vetenskap. Acad. and *Fauna Svecica* occasionally followed the ship by the thousands and were often with us for several days without the slightest storm occurring.² It is evident that everything related by navigators is not true. The birds build nests in the sargassum or seaweed and, if for no other reason, are generally present.

We first sighted America on the second of September, although for several days previous we had had the continuous visits of land birds, who, heedless of the sea, took their own time, often resting on the ship at night. On the fourth, thank God, we finally arrived safely at Philadelphia in New Sweden, America. I hurried out to the fields surrounding the city, but here I was dismayed. I found a number of our Swedish plants, but for the most part they had something strange about them. Except for these few, I found a distressingly large number of plants which I had never before seen. When I looked about the forest at the trees, they were all unknown to me with the exception of some which I had seen in European

Plants, of which the Seeds Were Recently Brought Home from North America for the Service of Those who Take Pleasure in Experimenting with the Cultivation of the Same in Our Climate," in *Agricultural History*, 13:33-64 (January 1939).

²The storm petrel, *Procellaria pelagica* L.

gardens. I did not find a single one of all of our Swedish trees, since beech, hazel, cherry, and horn bean are quite similar to ours yet differ somewhat—I can not say how. The winters here are just as cold as in Sweden. It clearly follows that trees and plants which thrive and withstand the winters here should do the same in Sweden. From trips already taken in this country, I have found the forests full of sassafras.

There are two kinds of chestnut trees, both of which produce fruit surpassing the European species in quantity and flavor.³ There are four kinds of walnut trees with fruit not inferior in quality to those of Europe and wood which can scarcely be equaled for carpenter work.⁴ The woods are full of grapevines of several kinds, and at this time of the year an abundance of grapes is brought to market. There is a kind of maple which is much more plentiful further north, as the climate here is almost too warm for it.⁵ Sap, which runs from these trees when tapped in the spring, is cooked and made into a sugar, which in sweetness and flavor resembles ordinary sugar. I received a large piece of it as a gift.

Various kinds of plants which grow wild in the woods are used for food. In some cases the seed is used; in others, the plant itself or the root which grows into a tuber like the potato. Quite a number of trees and herbs which at present I am unable to identify are used in dyeing. Wild mulberry of various kinds is especially common everywhere in the woods.⁶ Travelers who have visited the northern part of New England, where the cold during the winter vies with that of Torno and Lapland, assure me they have even seen wild mulberry trees there. Silkworms, which spin as good silk as that of southern Europe, have been kept as curiosities, not by one but by several individuals who have fed them on wild mulberry. From silk worms fed on the leaves of this tree, a former governor of New York was able to produce enough silk yearly to supply the needs of his entire family. The cultivation of silkworms has been forgotten because of the fact that day labor is extremely expensive and that the greatest profit is derived from the cotton trade which is carried

on with all of the West Indies. At present I will pass by the many medicinal plants found here and their uses, which are often deadly. If the Almighty allows me to have my health and if all goes well on my safe return to Sweden, I shall have an abundance of seed and living plants in my possession. I have no doubt that they will all do well in Sweden, provided the seeds arrive in good condition and are properly cultivated. There are ten or more different kinds of oak, but I do not value them as highly as our Swedish oak for they are not as durable.⁷ There are a great many kinds of grasses (*Graminibus*) here, but I have scarcely found one which deserves special attention or compares with any of our European grasses for meadow cultivation. Mr. Bartram informed me that the further north one travels the better the type of grass found. Of all of our European grasses to date I have found just one, namely, *Poa* 75 in *Flora. Svec.* All the others are native to America and have never grown wild in Europe.

In Sweden I heard first one and then another try to discredit the theory of subsidence of water. In the short time I have been here, I have convinced myself that the water is subsiding yearly in this part of the world. In many places where there is land there was formerly ocean. To those who travel about intelligently nothing could be clearer. Even the Indians who live around here would laugh at anyone who doubted this fact. There is a story common among them that many generations ago the ocean reached to this or that point, which now lies about 100 English miles inland from the present shore. Everywhere in the country in digging wells, various strata of mussel and cochlea shells are found deep in the ground and a great distance from the ocean. Occasionally whole trees, oak leaves, and many others are found to a depth of 18 to 20 feet below the ground. One thing noteworthy in this connection is the presence of petrified mussel shells in the mountains of New England and further north. These shells in their natural state, not petrified, occur in similar strata here and there in the ground. The mussel shells and animals included in these strata are not to be found until Carolina, which lies 100 miles further south, is reached. There they are said to occur in great quantities on the beach. This is the information I have received. Thus the matter

⁷ Kalm did not consider American oak durable when used in shipbuilding.

³ *Castanea dentata* (Marsh) Borkh. and *Castanea pumila* (L.) Mill.

⁴ Kalm was referring to hickory and walnut.

⁵ *Acer saccharum* Marsh.

⁶ *Morus rubra* L. The red mulberry is the only mulberry native to eastern North America.

stands. As I have not had the opportunity to observe for myself, I cannot state it as a fact.

I will now discuss a problem which puzzled me not only at the time of my departure from Sweden but also while in London. Various members of the Royal Society asked me to investigate why plants, which came from North America, bloom so late in Europe that their seeds seldom ripen. This is true in Sweden; it is also the case in London. The cause of all this is a difference in weather conditions. The heat here is usually dreadful during the summer and lasts further into autumn. The months of September and October are neither hot nor cold and tend to be the loveliest of the year. In reference to heat, September resembles most closely the month of July in Sweden and October the month of August. There are seldom cloudy days. The winds are rarely strong. The weather is usually calm or the breeze is mild. These are generally considered the most pleasant of the year as far as weather is concerned. During these months and late in the autumn, if it can be so called, most plants are at their best. At this

time *Aster*, *Salidago*, *Rudbeckia*, *Lobelia*, *Pedicularis*, *Digitalis*, *Oenothera*, *Helianthus*, *Gentiana*, *Eupatorium*, and several others are in full bloom, and in many the seeds are also ripening. Mr. Bartram assures me that occasionally when there is an early winter a great number of these late blooming plants do not even ripen their seeds in their native land. The Creator even has a remedy for this in that most of these plants have *radicem perennem*. At sunset late in September, on the 25th, the Celsius thermometer registered 0° and at nine o'clock in the evening 1 below zero.* The pools of water were covered with ice. This is a remarkable place so far as weather is concerned. When the wind is from the south or the weather is calm, it is like summer until late autumn. If, however, the wind turns to the northwest and blows from the Hudson Strait where there is always ice, it becomes so cold in a few hours that one can scarcely go out, and the cold penetrates to the marrow of the bone.

*The centigrade thermometer was invented by Anders Celsius (1701-1744).

NEWS NOTES AND COMMENTS

WANTED: A SEAL FOR THE SOCIETY

In accordance with a resolution adopted at the annual meeting of the Agricultural History Society on April 27, the members are urged to submit suggestions for an official seal for the Society. The executive committee is to make the selection, and if conditions permit the seal is to be carried on the journal beginning in 1944.

FORMAT CHANGES

The format changes manifested in this number of *Agricultural History* are in conformity with recommendations of the War Production Board, incident to its regulations concerning the use of print paper.

JOSEPH SCHAFER MEMORIAL

The membership of the Agricultural History Society will be especially interested in a volume entitled *Joseph Schafer: Student of Agriculture* (Madison, State Historical Society of Wisconsin, 1942, 67 p., port.). Dr. Schafer (Dec. 29, 1867-Jan. 27, 1941) served actively as president of the Agricultural History Society during 1931-32, and many members recall hearing his stimulating and provocative presidential address on "Some Enduring Factors in Rural Polity" (see *Agricultural History*, 6:161-180, October 1932) and reading his article entitled "The Wisconsin Domesday Book: A Method of Research for Agricultural Historians" (see *Agricultural History*, 14:23-32, January 1940). The latter, it should be noted, is a mature statement of a basic methodological contribution to historical research.

The volume, *Joseph Schafer: Student of Agriculture*, consists of a reproduction of the portrait of Dr. Schafer painted by Christian Abramsen in 1940; a Foreword by Dr. Edward P. Alexander, Dr. Schafer's successor as superintendent of the State Historical Society of Wisconsin; a discriminating estimate of "Joseph Schafer, the Historian," by Dr. Louise Phelps Kellogg, late senior research associate at the State Historical Society; an essay on "Joseph Schafer, the Man," by Clarence B. Lester, secretary of the Free Library Commission of Wisconsin; a "Bibliography of the Writings of Joseph Schafer," by Everett E. Edwards and Thomas J. Mayock of the U. S. Department of Agriculture; and "References on the Life and Work of Joseph Schafer." As indicated in the title, special emphasis is given to Dr. Schafer's contributions to the field of agricultural history.

MEETINGS PLANNED FOR DECEMBER 1942

The projected meeting of the Agricultural History Society with the American Historical Association and

other historical societies at Columbus, Ohio, on December 29-31, 1942, was cancelled at the request of the Office of Defense Transportation. The Society's program committee, consisting of President Carl R. Woodward of Rhode Island State College, chairman, Professor Joseph C. Bailey of Hunter College, and Professor Fletcher M. Green of the University of North Carolina, had arranged a joint session and a luncheon conference for December 31. The joint session was to have been a symposium on "Agrarian Policies, Past and Present," with Professor Harry J. Carman of Columbia University presiding. The speakers and papers scheduled for this session were: Mr. James A. Scott Watson, British Embassy, "Land Ownership, Farm Tenancy, and Farm Labor in Britain" (see *Agricultural History*, 17:73-80, April 1943); Professor V. P. Timoshenko, Stanford University, "The Agrarian Policies of Russia and the Wars"; and Professor James C. Malin, University of Kansas, "Mobility and History: Reflections on the Agricultural Policies of the United States in Relation to a Mechanized World." Dr. J. Clyde Marquis of the U. S. Department of Agriculture was to have spoken on "The Agrarian Policies of Ancient Rome" at the luncheon conference, and President Carl R. Woodward was to have served as chairman.

Also cancelled by wartime exigencies was the joint session of the Agricultural History Society with the American Farm Economic Association at Cleveland on December 29-31, 1942. The speakers and papers scheduled for this session were: Professor Benjamin H. Hibbard, University of Wisconsin, "Agriculture Following the Last World War"; and Mr. Harry Schwartz, War Production Board, "Farm Labor Adjustments after World War I" (see the *Journal of Farm Economics*, 25:269-277, February 1943). This program was arranged by the Society's program committee, consisting of Mr. Charles A. Burmeister, chairman, and Mr. Harry Schwartz, of the War Production Board, and Professor Warren C. Waite of the University of Minnesota.

THE 1943 ANNUAL MEETING OF THE SOCIETY

The Society held its 1943 annual meeting at the American Legion Club, 2437 Fifteenth Street, N.W., in Washington, D. C., on the evening of April 27. Forty-four attended the dinner and others were present for the business meeting and presidential address. President Carl R. Woodward of Rhode Island State College, the Society's president, presided.

The annual business meeting began with the report of the secretary-treasurer, Dr. Arthur G. Peterson. The mailing list as of April 10 included 376 paying members, 9 life members, and 23 exchanges, or a total of 408 compared with 403 on April 30, 1942. The secretary-

treasurer announced the liquidation of the Society's long-standing debt for printing.

The report of the auditing committee, consisting of Mr. H. H. Goldin, Miss Mary F. Carpenter, and Dr. Richard O. Cummings, was presented by Mr. Goldin. The committee commended the secretary-treasurer's financial statement and his diligence in the Society's behalf. A motion to accept the report was passed.

Copies of the report of Mr. Everett E. Edwards, the editor of *Agricultural History*, were available at the meeting. He pointed out that the continued inflow of articles indicated that the Society's journal has become the main outlet for the publication of research in the field to which it is dedicated. He also discussed the wartime economies effected in the journal, the reconstitution of the editorial board, and other pertinent matters.

It was voted to establish a standing committee on membership with the vice president as chairman and such other members as the president may appoint. The president was also authorized to appoint program committees to arrange joint meetings in December with the American Historical Association and the American Farm Economic Association, in the event that wartime conditions permit such gatherings. A motion to direct the president to take appropriate steps to ensure the Society's cooperation with the National Agricultural Jefferson Bicentenary Committee was approved by the membership.

The executive committee was authorized to develop a special program or activity for the twenty-fifth anniversary of the Agricultural History Society next year. In addition, the executive committee is to select, from suggestions submitted by the members, an official seal for the Society. If possible, the seal will be carried on the journal beginning January 1944. The secretary-treasurer is planning a report on the first quarter century of the Society for presentation at the 1944 annual meeting.

By unanimous vote of the membership the following were elected as officers of the Society for 1943-44: president, Professor James C. Malin, University of Kansas; vice president, Dr. Theodore R. Schellenberg, The National Archives; secretary-treasurer, Dr. Arthur G. Peterson, U. S. Bureau of Agricultural Economics; executive committee, Professor Joseph C. Bailey, Hunter College, and Professor Joseph C. Robert, Duke University. This election is in accord with the recommendations of the nominating committee consisting of Professor Harry J. Carman, Columbia University, chairman; Professor Asher Hobson, University of Wisconsin; Dr. Russell H. Anderson, Museum of Science and Industry, Chicago; Professor Bell I. Wiley, University of Mississippi; and Mr. Wheeler McMillen, Hopewell, New Jersey.

Following the business meeting, President Woodward read his presidential address, the subject being "Benjamin Franklin's Farm Lands."

SECRETARY-TREASURER'S FINANCIAL STATEMENT, MAY 1-DECEMBER 31, 1942

Balance on hand May 1, 1942

Checking account at McLachlen Banking Corporation.....	\$305.02
Interstate Building Association.....	63.00

Receipts:

Membership dues

1942.....	\$464.95
1943.....	329.56
Miscellaneous.....	15.00
	<u>\$809.51</u>

Back number sales.....	80.50
Reprint sales.....	74.24
Sale of mimeograph machine....	10.00
Interest.....	1.11
	<u>975.36</u>

Total receipts..... 975.36

Total receipts plus May 1, 1942 balance \$1,343.38

Disbursements:

Printing

3 numbers of <i>Agricultural History</i>	\$652.65
Reprints from 3 numbers....	61.91
Payments on back bills.....	208.70
	<u>\$923.26</u>

Postage.....	17.28
Stationery and supplies.....	8.50
Freight.....	2.57
Telegram.....	.40
	<u>\$952.01</u>

Total disbursements..... \$952.01

Balance on hand, December 31, 1942

Checking account at McLachlen Banking Corporation....	\$289.93
Checks for deposit.....	38.25
Stamps.....	.30
Interstate Building Association.	64.11
	<u>\$392.59</u>

Less outstanding check..... 1.22 391.37

Total accounted for..... \$1,343.38

SPECIAL NOTICE OF SEPTEMBER 1943 MEETING

The Agricultural History Society is to have a joint session on "Problems of Transition from War to Peace" with the American Farm Economic Association on the second afternoon of its Mississippi Valley regional meeting in the Hotel Statler at St. Louis on September 15-16, 1943. The following speakers and papers are scheduled: H. C. Taylor, "International Reconstruction and Mississippi Valley Agriculture"; and T. W. Schultz and D. Howard Doane, "Transition Readjustments in Mississippi Valley Agriculture."